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A STUDY TO DETERMINE

THE FEASIBILITY OF ESTABLISHING A SAME-DAY SURGERY PROGRAM AT GENERAL LEONARD WOOD ARMY COMMUNITY HOSPITAL, FORT LEONARD WOOD, MISSOURI

A Graduate Management Project

Submitted to the Faculty of

Baylor University

In Partial Fulfillment of the

Requirements for the Degree

of

Master of Health Administration

by

Captain James F. Mason, MSC

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19. ABSTRACT (Continue on reverse if necessary and identify by block number)
A study was conducted to determine the feasibility of establishing a same-day surgery program at General Leonard Wood Army Community Hospital (GLWACH). Following a literature review, personnel at the OTSG and HSC were contacted and information gathered from them concerning the establishment and operation of a same-day surgery program. Other Army facilities possessing same-day surgery programs were contacted to determine concepts for establishing a program. Additionally, difficulties experienced by existing same-day surgery programs were ascertained. A demand forecast, utilizing the exponential smoothing method, was completed which indicated that the current and the projected surgical volume at GLWACH are sufficient to justify the establishment of a same-day surgery unit. The assessment of potential same-day surgery candidates' attraction to the same-day surgery concept was accomplished. When solicited for comments regarding their willingness to convert types of operative procedures currently done as inpatient cases to same-day surgery cases, the surgeons almost unanimously said they would be willing. A brief analysis was conducted of
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the funding implication of the implementation of a same-day surgery program under the present resource allocation system, MCCUs. Lastly, an analysis of the funding implications of a same-day surgery program on the top 30 surgical procedures performed at GLWACH under the forthcoming DOD DRG-based resource allocation system was performed.

Based upon conclusions, GLWACH should plan for the implementation of a same-day surgery program. The implementation of such a program appears feasible. In fact, not only does a same-day surgery program appear feasible, it seems that it will become a necessity in light of the forthcoming environment of fiscal restraint. A same-day surgery program will, as demonstrated in this study, conserve resources--resources which will need to be efficiently managed under the DRG-based resource allocation system.

A Note to the Reader

There is a discrepancy in the paper that requires further explanation:

Pages 31-35 and 92-93 (Appendix E) are in dot matrix print. When I attempted to print these pages in the letter quality mode, the subscript and superscript letters required in the forecasting formulas were deleted. I cannot explain why. Therefore, I chose to include the affected pages in the dot matrix print to allow for a clear understanding of the comments of the formulas.

James F Mason

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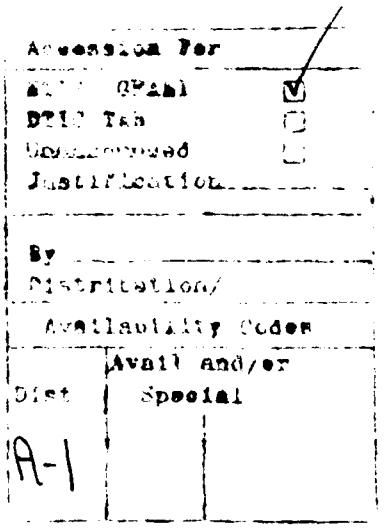

DEPARTMENT OF THE ARMY
HEADQUARTERS, USA MEDICAL DEPARTMENT ACTIVITY
FORT LEONARD WOOD, MISSOURI 65473-5700

REPLY TO
ATTENTION OF

HSXP-MD (340a) 23 May 1989

MEMORANDUM THRU: COL H. Michael Case, Deputy Commander for Administration/Preceptor, General Leonard Wood Army Community Hospital, Fort Leonard Wood, MO 65473-5700

FOR: Residency Committee, U.S. Army-Baylor University Graduate Program in Health Care Administration (HSHA-IHC), Academy of Health Sciences, U.S. Army, Fort Sam Houston, Texas 78234-6100

SUBJECT: Graduate Management Project

In accordance with the instructions contained in the Administrative Residency Manual, subject project is submitted by Captain James F. Mason, Administrative Resident, General Leonard Wood Army Community Hospital.

James F. Mason

JAMES F. MASON
Captain, Medical Service Corps
Administrative Resident

Encl

ACKNOWLEDGEMENTS

As I have come to appreciate, the completion a Graduate Management Project is dependent upon the efforts and support of many people. I would like to take this opportunity to recognize and thank all those who assisted me with this project.

First and foremost, I would like to thank my wife, Roxanne, for her continual support over these past two years. Not only did she endure the process, she made it more bearable for me as well. It was my wife who unselfishly gave me the time I needed to devote to my studies during both phases of the program.

I want to thank my young son, Clay, for his understanding during this endeavor. His never ending energy, smile, and joy of life were a source of renewal for me at the times I needed it most.

I especially want to thank the faculty of the US Army-Baylor University Graduate Program in Health Care Administration. I had not realized how much I had learned during the didactic phase of the program until I began my residency. It was during my rotations in both the Army facility and the private sector hospitals that I realized how well prepared I was for a future in health care administration. I am indebted to the faculty for their sharing of knowledge, guidance, and support in all endeavors.

A special thanks to Colonel H. Michael Case, MSC, Deputy Commander for Administration. I am deeply grateful for his guidance, support, and encouragement throughout this project and the residency as a whole. As my preceptor, his open sharing of knowledge and experience have invaluably benefited me as both an officer and an administrator.

I am grateful to the many members of the General Leonard Wood Army Community Hospital staff for their assistance with this and the many other projects completed during the residency. Further, I want to thank the staff for freely sharing their insight into and experience in all facets of health care delivery.

A heartfelt thanks to the staff of the Patient Administration Systems and Biostatistics Activity. Without their support, this paper might still be in the cognitive stage.

Last, but certainly not least, a special thanks to Mrs. Barbara Jones, my editor. I am deeply grateful for her continual support and helpful advice.

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I. INTRODUCTION

Health care prices in the 1980s have risen at a rate not unlike that of energy prices in the 1970s. Consequently, there has been a growing public alarm over the increase in health care costs ("Americans Say" 1986, 46). Concern for the continued rise in health care costs by the government, the health care industry, and the consumer has brought about various cost containment measures in recent years. Economy in health care is becoming ever more crucial as rates continue to increase and costs soar (Schneck 1984, 250).

Outpatient care is seen as a means of containing health care expenditures. The impetus to the outpatient setting is driven by employers and third-party payers who seek to eliminate reimbursement of expensive inpatient hospital bed days. Ambulatory care is a large portion of the health care industry in the United States and the most common contact people have with the health care system. Outpatient visits rose 8.3% through the third quarter of 1986 -- more than twice the 4.1% growth during the same period in 1985 (Nathanson 1988a, 593).

Ambulatory, or same-day, surgery is a rapidly growing segment of the outpatient care market (Nathanson 1988a, 593). The proportion of surgical procedures rendered on an outpatient basis in United States hospitals has risen

steadily. In 1980, 16.7% of all surgical procedures in hospitals were performed on an outpatient basis. By 1985, 34.5% of all surgical procedures in hospitals were performed on an outpatient basis (Burns 1987, 710). Same-day surgery made up 40% of all surgeries in 1986, and the projection for 1990 is that same-day surgery will constitute anywhere from 40% to 60% of all surgery performed in the United States (Nathanson 1988a, 592).

Ambulatory surgery has become a fully accepted modality for delivery of selected procedures (that meet predetermined criteria) of surgical care. Both the public and the medical profession are convinced that selected surgical procedures can and should be delivered out-of-hospital (Davis 1987a, 893).

Conditions Which Prompted the Study

There are three primary conditions which prompted the initiation of this study: (1) personal interest in the same-day surgery modality, (2) command interest in the modality, and (3) Army policy with regard to same-day surgery.

This writer was impressed, during the didactic phase of the United States Army-Baylor University Graduate Program in Health Care Administration, with the amount of literature available on the topic of same-day surgery. Upon review of the literature, the writer developed an interest in this modality as a viable cost-containment measure. Having gained an appreciation for the judicious use of resources over the course of his career as a logisitician and resource manager,

extensive utilization of same-day surgery in both the private and the military health care system seemed only prudent.

Therefore, it was hoped, that the same-day surgery modality could be discussed with the surgical and the nursing staff during the residency year rotations within the respective departments as a matter of personal interest. However, when solicited for potential research project topics, the Deputy Commander for Administration of General Leonard Wood Army Community Hospital (GLWACH), the Army hospital designated as the writer's residency site, presented a project on the topic of same-day surgery. The writer was thus afforded the opportunity to research a topic in which he had already developed a keen interest. Additionally, the prospect of studying an area of health care in which he had no prior experience was exciting because of the potential for gaining an appreciation for health care outside the purely administrative realm. Interfacing directly with clinical staff in a educational endeavor, and thereby greatly expand the writer's health care experience, was viewed as another benefit of this study.

The research problem, a determination of the feasibility of establishing a same-day surgery program at GLWACH, was presented by the chief nurse of the facility. The awareness of shrinking budgets in light of the impending initiation of a vastly different resource allocation system, one based on diagnosis-related groups (DRGs), had generated concern for the

facility's ability to compete for resources in the years to come. The recognition by the hospital leadership of the potential for a same-day surgery program to increase the efficiency of the organization was a primary impetus for the initiation of the research question.

Finally, from a more global perspective, the military health care delivery system, similar to that of the private sector, has been plagued with escalating costs in recent years (Brown 1987, 58). Consequently, Congress and the military health care leadership have remained cognizant of strategies initiated in the private sector to combat rising costs while providing quality patient care. As a result of the proliferation of same-day surgery in the private health care sector, with its professed effectiveness as a cost-containment strategy in addition to being an efficacious surgical modality, current Army policy directs the implementation of same-day surgery programs in Army medical treatment facilities (MTFs) where feasible. More specifically, Army policy is to encourage maximum use of same-day surgery in MTFs where it is cost-effective to do so (United States [US], Dept. of the Army [DA], Ofc. of the Adj. Gen. 1986). Given current Army policy with regard to the use of same-day surgery in the MTF, coupled with command interest in this modality at GLWACH, the feasibility of establishing a same-day surgery program at GLWACH will be examined.

Statement of the Problem

The problem is to determine the feasibility of establishing a same-day surgery program at General Leonard Wood Army Community Hospital, Ft. Leonard Wood, Missouri.

Objectives

The objectives of this project will be to:

1. Conduct a literature review to assess current and projected importance of same-day surgery in the delivery of modern health care.

2. Contact the Office of the Surgeon General (OTSG) and Health Services Command (HSC) for information pertaining to establishment and operation of same-day surgery units within the Army Medical Department (AMEDD).

3. Contact other Army facilities with existing same-day surgery units to determine concepts for establishing a same-day surgery unit.

4. Identify and assess the implications of common difficulties which have been encountered in the establishment of a same-day surgery program.

5. Determine whether the current and the projected surgical volume at GLWACH would be sufficient to justify the establishment of a same-day surgery unit.

6. Determine how many cases currently performed on inpatients could be expected to become same-day surgery cases if a new, convenient unit became available.

7. Assess if potential same-day surgery candidates will

be attracted to the same-day surgery concept.

8. Ascertain the surgeons' willingness to convert types of operative procedures currently done on inpatients to same-day surgery cases.

9. Determine the financial/funding implications of the same-day surgery program on a selected, frequently performed procedure under the present resource allocation system, medical care composite units (MCCUs).

10. Determine the financial/funding implications of the same-day surgery program on the top 30 (in terms of frequency) surgical procedures performed under the forthcoming Department of Defense (DOD) DRG-based resource allocation system. (Note: the writer intends to demonstrate the divergence of the two resource allocation systems in the accomplishment of objective 9 and objective 10, while maintaining the emphasis of the project on the DRG-based resource allocation system.)

11. Reach conclusions and make recommendations.

Criteria

The applicable criteria for this research will include the following:

1. Potential same-day surgery candidates must be willing to have appropriate procedures performed in the same-day surgery scenario.

2. The surgical staff, to include anesthesia, of the MTF must be willing to perform selected procedures on a same-day surgery basis.

3. The demand for appropriate surgical procedures must be greater than or equal to the capability to provide them on a timely basis.

4. More than half of the same-day surgery procedures selected for study must demonstrate a positive financial/funding implication under the forthcoming DOD DRG-based resource allocation system.

Assumptions

For the purpose of this study, it will be assumed that:

1. Staffing levels of those departments that participate in or support (e.g., surgeons from the Department of Surgery, nursing personnel from the Department of Nursing, anesthesia personnel, etc.) the same-day surgery program will remain constant.

2. Funding levels/resources will remain constant for the period of study.

3. Sufficient reliable data exists to complete the project.

4. Surrogate measures can be devised/used to compensate for incomplete or inaccurate data without compromising the validity of the study.

Limitations

This study will be constrained by the following factors:

1. The same-day surgery program must be capable of being operated within current staffing constraints.

2. The research period will cover a one-year time frame.

3. Neither the start-up costs nor the costs of renovating an existing surgical suite for use as a same-day surgery unit will be addressed.

Literature Review

Same-day Surgery: A Historical Perspective

The history of same-day, or ambulatory, surgery can be traced as far back as 3000 BC to procedures performed in ancient Egypt (Schneck 1984, 248). Prior to the advent of general anesthesia and modern hospital construction, most patients with financial means who had surgery recuperated at home. It was the indigent population and the soldiers who suffered the fate of hospital care. In time, and with increased technology, patients and physicians realized that the surgical results were superior and the care better when patients were treated in a hospital. The accepted procedure then became surgery and recuperation in a hospital setting. Indeed, most of the improvements in the quality of surgical care this century have been due to the fact that most major operations have been done in hospitals. Health insurance financing further solidified this pattern of care by paying only for procedures performed in the acute care setting. (Detmer and Buchanan-Davidson 1982, 685).

As early as 1909, the results of a 10-year follow-up study involving 8,988 pediatric cases from the Royal Glasgow

Hospital for Children deemed ambulatory surgery as safe as inpatient care for the same procedures. During the next 30 years, however, outpatient surgery aroused little interest, partly because efforts were directed toward newer anesthesia techniques. Additionally, during this time period, same-day surgery fell into disfavor among many surgeons in the United States because of poor anesthesia agents, concern about the quality of care, and nonacceptance by health care insurance carriers (Schneck 1984, 249). It took the exigencies of World War II to turn the attention of the surgical world to the study of wound healing and to introduce the concept of early ambulation. It seems a relatively short step from there to ambulatory surgery for procedures more complex than those appropriate for office settings yet not requiring extended postoperative monitoring and the special care only hospitals can provide. Still, the concept took many years to gain acceptance (Yankauer 1983, 1359). When early ambulation following surgery was popularized in the mid-1950s, especially for herniorrhaphy, interest in the concept of outpatient surgery was revived (Schneck 1984, 249).

Same-day Surgery: The Modern Era

The modern era of same-day surgery began in this country in the 1960s. An early program opened in 1961 at Butterworth Hospital in Grand Rapids, Michigan, followed the next year by the opening of a similar unit at the University of California at Los Angeles. These events turned out to be the stimulus to

the development of ambulatory surgery programs in the 1970s. The initiators of the later programs were responding, in the name of the private sector, to many urgent appeals from government, labor, industry, and the health care profession to streamline the delivery of medical care and to reduce its cost (Davis 1987b, 672).

Each year, more than 20 million surgical operations are performed in the United States (Davis 1987b, 671). According to industry observers, 50% of all surgeries performed in the nation could be done without hospitalization (Henderson 1987, 148). In fact, in 1985 alone, it was estimated that 600 million patient days could be saved in the United States by maximizing the potential of same-day surgery ("Maximizing Outpatient" 1985, 61). Another study reported a 25% reduction in hospital charges and a savings of about two bed days per patient using same-day surgery. Coordination is the major challenge to establishing this routine (Detmer and Buchanan-Davidson 1982, 694).

The trend toward same-day surgery grows stronger every year as advancing technology allows more procedures to be performed safely in this modality. For example, lasers and faster-acting anesthetics have increased the number of surgical procedures which can be appropriately performed on an outpatient basis (Nathanson 1988a, 593). The shift of surgery from inpatient status to same-day procedures has had significant results, including a rise in outpatient surgery of

77% between 1979 and 1983 alone (Shannon 1985, 54).

In 1980, the Board of Regents of the American College of Surgeons released a policy statement on same-day surgery. The members of the board listed the benefits of outpatient surgery as greater accessibility, scheduling convenience for both physician and patient, and reduction of patient anxiety and cost (Detmer and Buchanan-Davidson 1982, 697). Same-day surgery has become widely accepted in recent years and is now viewed as a safe and effective medical practice (US, DA, HSC 1986. 1).

The shift of surgical procedures to the same-day modality is driven by a combination of economic interest and benefit to patient care. More specifically, the advantages of same-day surgery include:

1. Patient's lifestyle is only minimally changed. This method of care interferes only slightly with the lifestyle to which the patient is accustomed. Patients of all ages enjoy and appreciate being able to avoid hospital routines, rules, and restrictions (Davis 1987b, 672).

2. Patient receives more individual attention. Both the concept of same-day surgery and the facility in which it is provided are designed specifically for this type of patient. Consequently, the patient is aware of, is comforted by, and appreciates more personal attention (Davis 1987b, 673).

3. Patient anxiety is lessened. Patients are spared the emotional stress of hospitalization (Detmer and

Buchanan-Davidson 1982, 697). Additionally, not being mixed with other acutely ill patients has an encouraging and salutary effect on ambulatory patients (Davis 1987b, 673).

4. Costs are reduced. Patients are well aware that they, and their insurance carrier, are being subjected to lower charges because the same-day surgery modality, to include lack of hospital stay, experiences lower costs (Davis 1987b, 673).

5. Less risk of nosocomial infection is present. Many patients are currently aware of the possibility of acquiring an infection if they are admitted to the hospital; they are grateful for the opportunity to avoid even this low risk. In fact, many same-day surgery programs report zero incidence of infection, a dramatic improvement from inpatient infection ranges of 5% to 25% ("Maximizing Outpatient" 1985, 61).

6. Disability is decreased with earlier return to work. Workers associate their return home the same day with the perception that they have not had an operative procedure of major magnitude. Consequently, they ambulate better, resume normal activity almost immediately, and return to their work sooner than would an identical group of patients having the same surgical procedure in an acute hospital setting (Davis 1987b, 673).

Conversely, according to Davis (1987b, 674), the disadvantages of same-day surgery include:

1. Patients may not adhere to preoperative instructions. Prior to entering the facility the morning of the operation,

the patient is often away from all health care control and assistance. Consequently, it is extremely important that the patient understand the preoperative orders and the need to rigidly adhere to them. This does not always take place.

2. Patients may not have transportation to and from the unit. In certain groups of people, particularly the aged and those in the lowest economic groups, transportation becomes a serious problem. Consequently, hospital admission in lieu of ambulatory care may be required for this reason alone.

3. Patients may have no competent assistance at home. Patients living alone are sometimes unable to have help available when they return home. At times, this problem may be insurmountable and hospital admission is required. This consideration is of particular importance to the military environment.

4. Patients may be troubled by the absence of immediately available supportive and resuscitative capabilities. The patient may be concerned that there is less resuscitative support in some same-day surgery units than in other areas of the hospital, should it be needed.

Given the many advantages and disadvantages of this surgical modality, the prime mover in the civilian sector for establishing a same-day unit is its economic benefits. Although hospital-based ambulatory surgery (an autonomous or integrated program) was conceptualized in the early 1900s, it was not until the advent of Medicare and Medicaid and the

exponential increase in health care costs that a marked increase in demand for and utilization of same-day surgery arose. Federal and local insistance on cutting unnecessary costs and lengthy hospital stays has provided the economic incentive to increase the usage of private sector hospital-based same-day surgery facilities (Lenneville and Steinbruckner 1982, 963). Same-day surgery, for many patients, can alleviate many costs and streamline a significant part of the health care system (Schneck 1984, 250). Recent surveys have shown that same-day surgery is one of the health care cost-containment strategies most frequently pursued by American business (Lagoe and Milliren 1986, 150).

In summary, one of the great accomplishments of modern medicine has been the transformation of surgery from a dangerous form of care to one with acceptable risks. Despite gains in the quality of inpatient care, recent research suggests that the growth in same-day surgery has benefited patients by removing their care from the inpatient setting. According to one source, it is very likely that same-day surgery will continue to grow in importance. Insurers and patients will increasingly demand outpatient procedures, and surgeons will seek out facilities that have well-developed same-day surgery programs. Finally, the federal government and private industry are determined to control health care costs in a proactive way. In addition, there is a clear decline in physician autonomy in the United States health care

system, permitting changes in health care delivery to take place without strong physician support. Thus, health maintenance organizations, preferred provider organizations, and third party administrators can move aggressively to shorten hospital stays and substitute same-day for inpatient surgery even if this is not desired by the responsible physicians. Various technological, social, economic, and regulatory forces have combined to place more of the surgical workload in the outpatient setting; this trend will continue. Hospitals can ignore this development only at their peril ("Outpatient Surgery" 1987, 97)

DRGs: A History in the Private Sector

A second means of containing health care costs, enacted in 1983 at the national level in the private sector, is Medicare's change in its method of paying hospitals from a cost based, retrospective reimbursement system to a prospective payment system. This switch to DRGs gave hospitals a financial incentive to contain rising health care costs (Hsia, Krushat, and Fagan 1988, 352).

The DRG system was developed at Yale University in the 1970s ("Missouri Hospital" 1988). This case mix methodology, developed by academicians, was first implemented at the state level in response to New Jersey's health care financial crisis. Leaders in the state government were ready to try a new solution. The New Jersey State Department of Health sought to experiment with the new reimbursement method, which

was based on payment by the case rather than on hospital days. Beginning in 1980, the state began setting hospital rates for all payers, factoring in the cost of uncompensated care. The state had assumed a role at the center of the hospital system. It is interesting to note that, in 1970, New Jersey hospitals were autonomous institutions. A decade later the state had come to dominate hospitals in the Garden State, setting rates, regulating the pace of development and impinging on the practice of medicine. Prospective payment based on DRG measures was at the heart of this growing state role (Morone and Dunham 1984, 78).

The political evolution of DRGs in New Jersey involved many actors in many political arenas, with one of the least obvious--*the federal government*--being the most crucial. Without the federal government, specifically the Health Care Financing Administration (HCFA), it is unlikely that a DRG system would have evolved in New Jersey. The HCFA grants paid for the staff that designed the program. Furthermore, the HCFA repeatedly provided a convenient cover for the implementers in New Jersey. When hospitals balked at the rapid implementation, the timetable was blamed on Washington bureaucrats (Morone and Dunham 1984, 84).

In retrospect, one can now discern that the HCFA's interest in New Jersey was in developing a cost-control experiment at the state level. The significance of the experiment became clear in the fall of 1982 when Congress gave

the HCFA three months to propose a solution to rising Medicare costs. The HCFA, reviewing a thin list of alternatives, returned with the New Jersey experiment. In October 1983, Medicare began setting its rates using the DRG system (Morone and Dunham 1984, 85).

Recognizing that hospitals would need time to adjust to the system, Congress set up regional urban and rural DRG rates, adjusted for wage variations. Additionally, the system was designed to be phased in over four years. At first, only 25% of the payment for each Medicare payment was to be based upon a DRG rate, the rest to be made up of cost-per-case amount specific to the hospital. Each year, the DRG perecentage was to increase until, in the fourth year, the entire payment was to be based upon a national urban or rural rate (Patterson 1983, 642).

This new form of hospital reimbursement, DRGs, was designed to change the financial incentives facing hospitals. Under traditional payment schemes, the more a hospital did to a patient, the more money it received. Under DRGs, a price is set prospectively for each type of case or illness. All diagnoses for which patients are hospitalized were originally divided into 467 categories (now approximately 473) having similar clinical characteristics (e.g., diagnosis, age, treatment), each with a fixed price set by computing what similar types of hospitals had been charging for similar cases. Each DRG was expected to reflect groups of patients

who consumed similar products or services and, consequently, incurred similar costs. Revenue would not vary with what the hospital did. If a hospital could provide its product for less than the established DRG price, it could pocket the savings. If it cost more, the facility bore the burden. That notorious extra test would now cost the hospital money (Morone and Dunham 1984, 81).

Health care administrators recognized quickly that "the rewards would go to the efficient." Additionally, it was recognized that the impact on the operating room would be great because about 45% of DRGs are surgically oriented. The bottom line was clear--to win under the DRG system, a hospital has to be operated as economically as possible (Patterson 1983, 640).

DRGs and the Military Health Care System

Having imposed DRGs upon the private health care sector in 1983, thereby reducing Medicare costs to the government, it was not long before Congress began contemplating mandating this cost-containment measure for the DOD health care system. The military health care delivery system had also been plagued with escalating costs in recent years (Brown 1987, 58)

As recent as 1986, in the view of some legislators, "a more promising way to manage resources was by DRGs." Congress had come to recognize that the medical care composite unit, which had guided resource programming in MTFs for the past 25 years, deprived direct care providers of incentives to work

efficiently. The MCCU, based on a simple formula that aggregates hospital admissions, hospital bed-days, live-births, and outpatient visits, allows for a system in which, "the greater the workload, the larger the budget, regardless of the workload's complexity or its contribution to overall health." Consequently, the MCCU results in a bias in favor of expensive inpatient services. DRGs were seen by Congress as a budgeting tool by which hospitals with the most complex workload could receive the most resources. Further, it was felt that DRGs would encourage military hospitals to shorten the average length of stay (US, House 1986). Length of stay is one of the main clinical performance indicators or measures of efficiency (Morgan, Paul, and Devlin 1987, 884)

Because of these advantages and others, to include helping commanders monitor the use of resources and the quality of care (DRGs set norms of medical practice), Congress recommended that the DOD institute DRGs as a primary tool for allocating direct care resources (US, House 1986). Subsequently, Public Law 99-661, entitled the National Defense Authorization Act for Fiscal Year 1987, was enacted requiring the military services to begin allocating resources to all MTFs on the basis of DRGs (Coventry 1988). Most recently, Public Law 100-180, entitled the National Defense Authorization Act for Fiscal Years 1988 and 1989, was enacted providing guidance to implementation of DRG-based resource allocation. In accordance with P.L. 100-180, the

implementation of resource allocation using the DRG-based methodology will be phased in over several years, beginning in Fiscal Year 1989, in order to minimize resource shift turbulence and to provide all levels of management the opportunity to learn and benefit from the system (US, DOD, Asst. Sec of Defense [Health Affairs] 1988).

The importance of the implementation of DRGs into the resource managment of MTFs is without question, despite the fact that "inevitably, some hospitals are going to lose dollars and some are going to gain dollars" (Ash 1986, 6).

Research Methodology

An extensive literature review was conducted using resources at the Academy of Health Sciences, Ft. Leonard Wood, and civilian institutions. Trends and developments with regard to same-day surgery in the delivery of modern health were determined.

OTSG and HSC were contacted to determine if regulations, guidelines, requirements, or restrictions exist, or are pending, that pertain to the establishment and operation of same-day surgery units within the AMEDD. Subsequently, pertinent information was reviewed to identify problems associated with establishing and operating a same-day surgery program.

Army facilities with existing same-day surgery units were contacted to determine concepts for establishing a same-day surgery program. Additionally, common difficulties were

ascertained through dialogue with the other facilities and assessed for their implications to the Ft. Leonard Wood scenario.

A demand forecast was developed using previous workload data. Historical data was requested from the Patient Administration Systems and Biostatistics Activity (PASBA) on cases currently performed on an inpatient basis at Ft. Leonard Wood. These data were compared to a list of suggested same-day surgery procedures (Appendix B) to determine how many cases currently performed on an inpatient basis could be expected to become same-day surgery cases. The number of cases expected to become same-day surgery cases were reduced by: (1) persons who live alone or in barracks, (2) persons who are in school, basic training, and advanced individual training, and (3) persons who do not meet anesthesia guidelines for safe same-day surgery.

The acceptability of the same-day surgery concept by the patient population was ascertained through a focused literature review on this topic. Previous studies, including those involving questionnaires to patients, were cited to determine the likelihood that same-day surgery candidates would be attracted to the same-day surgery concept.

A determination of the surgeons' willingness to convert types of operative procedures currently done as inpatient procedures to same-day surgery cases was accomplished through the use of a standard survey given to the Chief of Surgery and

the staff subordinate to him.

In order to determine the financial/funding implications of the same-day surgery program under the present resource allocation system, MCCUs, the actual MCCUs generated by a selected surgical procedure via the inpatient modality was compared with the MCCUs which would have been generated by a same-day surgery program.

In order to determine the financial/funding implications of the same-day surgery program under the forthcoming DOD DRG-based resource allocation system, the top 30 (in terms of frequency) surgical procedures currently performed on an inpatient basis were compared to their appropriate same-day surgery procedure counterparts. Information regarding the DOD DRG-based resource allocation system was obtained through the Health Care Studies Division of the United States Army Health Care Studies and Clinical Investigation Activity, HSC. A listing of anticipated DRGs, with high and low cutoffs in days for each, was obtained from this activity. This listing was necessary because only those DRGs with a low cut-off point of one day are lucrative from the standpoint of resource allocation in the same-day surgery modality. Further, procedures which are currently being done on an inpatient basis (PASBA data), but which would be same-day surgery candidates, were scrutinized to determine the DRG under which they would most likely fall. While it is understood that a single procedure can potentially fall under more than one DRG,

utilizing historical data, the most likely DRG assignment was determined. After it was determined under which DRG the surgical procedures are most likely to fall, the positive or negative funding/resource allocation implications were ascertained.

Finally, conclusions were reached with regard to the feasibility of the establishment of a same-day surgery program at the Ft. Leonard Wood MTF and a recommendation rendered.

II. DISCUSSION

The General Leonard Wood Army Community Hospital was constructed as a 500-bed facility but is currently staffed and authorized to operate 157 beds. The catchment area population of the hospital totals approximately 35,000 people. There are, however, approximately 73,500 additional eligible beneficiaries in the GLWACH health service area (HSA). GLWACH's HSA encompasses 89 counties in the state of Missouri and the entire states of Illinois, Iowa, Michigan, Minnesota and Wisconsin. During Fiscal Year (FY) 1988, the GLWACH had an average of 128 beds occupied daily and an operating budget of $46.6 million. Finally, the average length of patient stay for FY 88 was about 4.3 days (US, DA, GLWACH, 1988, 1).

Input From HSC and OTSG

As was discovered in the literature search, HSC publishes a pamphlet, HSC Pamphlet 40-7-3, the purpose of which is to provide guidance to MTFs where a same-day surgery program is either in effect or is being considered for implementation. Consequently, a representative at HSC was contacted to determine if this pamphlet was still current. Additionally, the HSC representative was queried to determine if other regulations, guidelines, requirements, or restrictions existed, or were pending that pertained to the establishment and operation of same-day surgery units within the command. A

telephonic interview with MAJ A. Cornell, MSC, revealed that HSC Pamphlet 40-7-3 remains a "good, active document." Further, MAJ Cornell stated that no other regulations, guidelines, etc., existed at the Command level and that "nothing would change at a minimum through July 1989." MAJ Cornell was of the opinion that a same-day surgery program would likely be beneficial to a MEDDAC (Medical Department Activity) in light of DRG-based reimbursement and encouraged pursuit of the study. Finally, he provided information as to where other same-day surgery programs were located within HSC in addition to points of contact for reference at OTSG.

A representative from the OTSG, Clinical Policy Division, was contacted to determine the latest views, in addition to a policy stance, regarding same-day surgery from the highest policy-making body within the AMEDD. A telephonic interview was conducted with MAJ C. Fehring which revealed some interesting findings. When asked if the OTSG policy letter, which expired 31 December 1988 (Appendix C), directing implementation of same-day surgery programs in MTFs where cost effective to do so had been superceded, he informed the writer that it had not. MAJ Fehring further explained that, "while there has been no new policy letter issued to the field, the spirit of the expired letter remains intact." In other words, the decision to establish a same-day surgery program continues to be left up to the local Commander's discretion based upon adequateness of facilities, etc.

The most interesting, and perhaps controversial, information gained from MAJ Fehring concerned the topic of implementation of DRG-based reimbursement within the DOD. MAJ Fehring revealed, according to a briefing he recently attended, that the DOD-contrived DRGs, in their final form, may yet continue to reward inpatient care to a degree not previously known. Therefore, he advised that, while it would be prudent to study the issue of establishing a same-day surgery program in light of the forthcoming DRG-based reimbursement, it would be advisable not to act too quickly in implementing a program. MAJ Fehring recommended that "GLWACH be prepared to act in establishing a program if it becomes financially necessary to do so but to move cautiously toward implementation for the time being."

In summary, the input gained regarding same-day surgery from HSC and OTSG, while somewhat contradictory, was nevertheless interesting. Further, it was beneficial in that it should aid this organization in determining its future with regard to same-day surgery, particularly concerning the timing surrounding possible implementation of a program.

Input from Other Hospitals with Same-Day Surgery Programs

Same-day surgery, while one of the fastest growing healthcare services of today, is a modality not without problems (Nathanson 1988b, 63). Other Army facilities with existing same-day surgery programs were contacted to determine

common difficulties for their implications to the Ft. Leonard Wood scenario. Additionally, information regarding concepts, or types of programs, was sought.

Telephonic interviews with personnel from two different same-day surgery programs revealed some interesting findings. Table 1 depicts the types of programs and the difficulties found at the various facilities.

Table 1

Concepts and Difficulties--Other SDS Programs

Facility Location	(Type of Program) Concept	Difficulties
Ft. Stewart	Integrated	Scheduling, staffing
Ft. Meade	Integrated	Patient follow-up

With regard to the types of programs operated, the writer found that at both facilities contacted the integrated concept was utilized. In other words, they are the type of programs in which personnel, operating room time, and all hospital facilities are shared with the traditional surgical programs.

The program at Ft. Stewart has been in existence for over four years yet continues to encounter problems with scheduling and staffing. Erratic same-day surgery case scheduling (e.g., eight cases one day, two the next) has served as the precursor to staffing problems. For example, there have been days when too many or too few cases were scheduled, resulting in the

staff either being inadequate to meet the workload or having too much idle time. Additionally, as a result of days when too many patients were scheduled, the Head Nurse of the unit has placed a cap on the number of patients who can be scheduled on a given day. This restriction is thought to have adversely affected the same-day surgery program utilization rate by the surgeons (Bailey 1989).

The same-day surgery program at Kimbrough Army Hospital, Ft. Meade, has been in existence for several years too. Currently, the staff of the program experience some difficulty in postoperative follow-up. For example, follow-up phone calls to patients to ensure compliance with postoperative instructions can be taxing upon the staff. The phone calls to same-day surgery patients consume many man-hours. Another problem existing at Ft. Meade involves the use of "partnership" physicians in the same-day surgery program. The problem has been in acclimating these private sector physicians to unique requirements such as Army procedures and forms (Coffey 1989).

The difficulties found in the same-day surgery programs at the two Army hospitals do not appear to be unique to the military environment. For example, the scheduling problem experienced at Ft. Stewart appears, after reviewing the literature, to be one of the major problems existing at private sector, hospital-based same-day surgery programs too. According to Nathanson, the inability to control scheduling

and the forced use of first-come, first-served scheduling introduce serious inefficiencies and excessive costs to the same-day surgery program (1988b, 66).

Operating room scheduling has been a popular topic of study in the literature. Surveys of same-day surgery programs such as the one in 1983, in which scheduling was the program weakness mentioned most by physicians, have been the impetus of such study (Bradshaw and Zobin 1987, 67). In one study, the variables affecting scheduling were examined to find a policy that would maximize resources by reducing idle time and decreasing overtime. The recommendation of the study was to discard the existing first-come, first-served system in lieu of a "blocking" schedule policy. To use the blocking policy, one divides the day into two blocks of time to accomodate varying types and lengths of procedure (Hackey, Casey, and Narasimhan 1984, 1174). According to Nathanson, block scheduling is most often used with same-day surgery programs (1988b, 70). The same-day surgery setting lends itself to scheduling in advance at times convenient to surgeon and patient because the majority of procedures are elective (Drier, Van Winkle, and Wetchler 1984, 673).

In summary, the difficulties identified which are associated with same-day surgery must be planned for. As experiences documented in the literature point out, problems such as scheduling and staffing, although beyond the scope of this study, should be anticipated and possible solutions

identified. Ample literature appears to be available to aid in this endeavor. Efficient management results in a reduction in costs and is synonymous with quality (Nathanson 1988b, 71).

Demand Forecast

A demand forecast was needed in order to determine if the projected same-day surgical volume would be sufficient to justify the establishment of a same-day surgery program. According to Levin, Rubin, and Stinson, the solution to this problem required the investigator to find solutions to two additional practical problems: (1) how to select the best forecasting method for the given situation and (2) how to evaluate the forecast accuracy (1986, 108).

Numerous quantitative forecasting methods have been developed in recent years. While there are a variety of forecasting methods available, including causal and judgmental, the extrapolation method was chosen for its ability to use historical data. The extrapolation method assumes that historical data contain a stable pattern, such as a trend or a seasonal cycle, which will continue in the future. Moving averages and exponential smoothing are related extrapolation methods which use special kinds of averages of the most recent data to forecast. The first step in any forecasting problem, however, should be to use the naive model to compute benchmark accuracy. A model that cannot beat the naive model should be discarded. Checking model accuracy against that of the naive model may seem a waste of time, but,

unless one does so, it is easy to choose an inappropriate forecasting model (Levin et al. 1986, 113).

The naive model assumes that the value of the series next period will be the same as it is this period:

Forecast for next period → F_{t+1} = X_t ← Observed value this period

where F is the forecast and X is the observed value. The subscript t is an index for the time period. The current period is t, and the next period is t + 1.

Table 2 shows the potential number of suggested same-day surgeries or, in essence, the demand, at GLWACH over 12 quarters beginning in January 1986 and running through December 1988. The data were provided to the author by the PASBA (Appendix D).

Table 2

Suggested Same-day Surgeries--January 1986 to December 1988

Time Period	Quantity	Time Period	Quantity
Jan-Mar 1986	97	Jul-Sep 1987	130
Apr-Jun 1986	243	Oct-Dec 1987	153
Jul-Sep 1986	228	Jan-Mar 1988	266
Oct-Dec 1986	239	Apr-Jun 1988	268
Jan-Mar 1987	211	Jul-Sep 1988	161
Apr-Jun 1987	87	Oct-Dec 1988	165

Table 3 depicts the data provided by the FASBA applying the naive forecasting model. Note that the mean error measures

Table 3

A Naive Forecasting Model

t	X_t	F_t	$e_t = X_t - F_t$	Absolute error e_t	Absolute % error e_t/X_t X 100	Sqrd error e_t^2
1	97					
2	243	97	146			
3	228	243	-15			
4	239	228	11			
5	211	239	-28			
6	87	211	-124			
7	130	87	43	43	33.1%	1,849
8	153	130	23	23	15.0%	529
9	266	153	113	113	42.5%	12,769
10	268	266	2	2	.8%	4
11	161	268	-107	107	66.5%	11,449
12	165	161	4	4	2.4%	16
13		165				
Sum (periods 7-12)				292	160.3%	26,616

MAD = 292/6 = 48.6
MAPE = 160.3/6 = 26.7%
MSE = 26,616/6 = 4,436

are computed only for the last half of the data. According to Levin et al. (1986, 114), the reason for this is that the forecasting model to be used later is evaluated by dividing the data into two parts. The first part is used to fit the forecasting model. Fitting consists of running the model through the first part of the data to get "warmed up." The fitting of data is called the warm-up sample. The second part of the data

is used to test the model and is called the forecasting sample. Accuracy in the warm-up sample is irrelevant. Accuracy in the forecasting sample is more important because the pattern of data often changes over time. The forecasting sample is used to evaluate how well the model tracks such changes.

There are no statistical rules as to the point at which to divide the data into warm-up samples and forecasting samples. A good rule of thumb, however, is to put at least six nonseasonal data points or two complete seasons of seasonal data in the warm-up sample (Levin et al. 1986, 114). There are six nonseasonal data points in the warm-up sample in Table 3.

There are several ways to measure forecast accuracy. The possibilities include the mean absolute deviation (MAD), the mean absolute percentage error (MAPE), and the mean square error (MSE). The MSE gives more weight to large errors and is most often used in practice (Levin et al. 1986, 113).

Following application of the naive model to the PASBA data and establishment of a benchmark against which to measure forecast accuracy, the exponential smoothing method of demand forecasting was utilized. The exponential smoothing method of extrapolation was chosen over the moving averages method because it requires less computation and less data storage (Levin et al. 1986, 116; Chase and Aquilano 1977, 234).

The equation for exponential smoothing is

Forecast for t + 1 = Forecast for t + α × Error in t

$$F_{t+1} = F_t + \alpha e_t$$

In other words, the new forecast is equal to the old forecast plus a fraction of the error. The fraction is α (alpha), called the smoothing parameter, which lies between 0 and 1.

Table 4 depicts the results of exponential smoothing as applied to the historical data. To begin this process, however, one must supply a forecast for period 1 and an α value. The first forecst (F_1) was computed by using the mean of the warm-up sample. To choose α, a range of values had to be tested (Appendix E). The "best fitting" α is the one that gives the minimum MSE in the warm-up sample (Levin et al. 1986, 118).

Table 4

Exponential Smoothing, $\alpha = .10$

t	Data X_t	Forecast F_t	Error $e_t = X_t - F_t$	Forecast for t + 1 $F_{t+1} = F_t + \alpha e_t$
1	97	184	-87	$F_2 = 184 + .1(-87) = 175$
2	243	175	68	$F_3 = 175 + .1(68) = 182$
3	228	182	46	$F_4 = 182 + .1(46) = 187$
4	239	187	52	$F_5 = 187 + .1(52) = 192$
5	211	192	19	$F_6 = 192 + .1(19) = 194$
6	87	194	-107	$F_7 = 194 + .1(-107) = 183$
7	130	183	-53	$F_8 = 183 + .1(-53) = 178$
8	153	178	-25	$F_9 = 178 + .1(-25) = 176$
9	266	176	90	$F_{10} = 176 + .1(90) = 185$
10	268	185	83	$F_{11} = 185 + .1(83) = 193$
11	161	193	-32	$F_{12} = 193 + .1(-32) = 190$
12	165	190	-25	$F_{13} = 190 + .1(-25) = 188$
13		188		

MSE (periods 7-12) = $53^2 + 25^2 + 90^2 + 83^2 + 32^2 + 25^2 / 6$
= 3350

As shown in in Table 4, the MSE for exponential smoothing is an improvement over that of the naive model. Therefore, the forecast of demand for period 13 could be made with improved accuracy and confidence.

In order to reduce the number of cases expected to become same-day surgery cases by persons lacking appropriate supportive care following surgery (e.g., those living in barracks), a sample of surgeons across the various services were asked to estimate the percentage of their patients fitting this category. The average percentage of patients expected to be ruled out as same-day surgery candidates was 12%, with no surgeon identifying more than 30% of his/her patients as noncandidates. Given the low average percentage of same-day surgery candidates ruled out because of the lack of supportive care at "home," the total number of expected cases did not drop drastically (e.g., from 188 to 165 in the Second Quarter, FY 1989). As the forecast revealed, the demand for same-day surgery, in the near future, will remain constant.

In summary, the demand for potential same-day surgery cases at GLWACH certainly exists. Additionally, according to LTC J. Abshier, Comptroller, GLWACH, one should keep in mind that the present demand is likely to increase as a result of two factors. First, the new engineer school is opening at Fort Leonard Wood in January of 1990. Secondly, the demand will likely increase further when the proposed base

realignment becomes a reality. Estimates are that Ft. Leonard Wood's troop population will increase substantially as a result of base realignment. These two enviromental changes, in the writer's opinion, can serve only to increase the demand for all hospital services, same-day surgery included.

Patient Acceptance

An objective of this study was to assess whether potential same-day surgery candidates would be attracted to the same-day surgery modality. While a survey of candidates to determine patient acceptance was planned in the formulation of the research methodology, a valid and reliable questionnaire could not be identified through a literature review. More information regarding the unsuccessful search for a valid and reliable instrument can be found below in the section labeled Departures from the Graduate Management Project Proposal. After coming to the conclusion that the building of a valid and reliable survey instrument by the investigator would constitute a Graduate Managment Project in itself, a surrogate method of determining the likelihood of patient acceptance was sought.

Regardless of the inablity to survey candidates directly, the writer found much literature, in the quest for a questionnaire, to support the position that patients will accept the same-day surgery concept. A concise review of current literature, then, became the surrogate method for determining whether or not patients would accept same-day

surgery.

In a society in which time and convenience are at a premium, outpatient care is preferred to hospitalization (Nathanson 1988a, 596). Likewise, patients prefer same-day surgery over hospitalization because it is more convenient, quicker, and less embarrassing, and because the change in lifestyle of the patient and his/her family is minimized (Davis 1987a, 893).

The American public of the late 1980s is well informed about health matters and the need to have economy in health care delivery. People want to participate in their own health care and decisions about their health. Consequently, they understand the advantage of having their operative procedure, if appropriate, done on a same-day surgery basis; they want and will often insist on this. Surgeons no longer have to convince patients that this is the more appropriate and the better way to have this magnitude of operation (Davis 1987a, 895).

A study of the satisfaction levels of 900 surgical patients treated in facilities in Arizona indicated that more patients treated in hospital-based and freestanding same-day surgery units would choose the same setting again than would those treated as inpatients. Patients felt that they had saved both money and time and had been spared the emotional stress of hospitalization (Detmer and Buchanan-Davidson 1982, 697). Perhaps the most convincing evidence of patient

acceptance, though, is other surveys conducted demonstrating that approximately 80% of the public prefer the same-day surgery approach to inpatient care for minor procedures (Jensen and Jackson 1985, 76). Patient comfort and quality of care are central to the appeal of same-day surgery (Lagoe and Milliren 1986, 150).

In these days of patients' assumption of greater responsibility for their own health, this seems to be a natural and a proper way to have surgery. The obsession with wellness, good health, and responsibility for one's own health which is evident throughout the country today will only continue and increase. This will play an important and significant role in expanding acceptance and utilization of same-day surgery (Davis 1987a, 895).

In summary, the literature strongly suggests that patients will be attracted to and accept the same-day surgery modality. Given this body of knowledge and the lack of any contradictions to it existing in the scenario at Ft. Leonard Wood, one can predict with confidence that same-day surgery would be a popular service with patients.

Physician Acceptance

Another objective of the study was to determine the surgeons' willingness to convert types of operative procedures currently done as inpatient procedures to same-day surgery cases. A structured interview conducted with the Chief of Surgery and the staff subordinate to him was planned in the

research methodology. However, after assessing the time required to talk to each surgeon independently and the negative effect this endeavor would have upon both the providers' and the writer's productivity, it was decided to compile the interview questions into a concise questionnaire. The survey was designed intentionally to be short and easy to complete. A complete discussion of the change from conducting a standard interview to utilizing a questionnaire is found in the Departures from the Graduate Management Project Proposal section of the paper below.

The questionnaire used in the study is Appendix F. The survey contains 12 questions, incorporating several different types of questions and a choice of varied responses for the respondent. A variety of choices was offered in hopes of minimizing any unintentional bias which might have been incorporated into the questions. Further, by means of an open-ended format on appropriate questions, respondents were not constrained to only the choices offered (Bradshaw and Zobin 1987, 65).

Prior to distribution, an evaluation of the survey was conducted by the Deputy Commander for Clinical Services and the Chief, Department of Surgery. This presurvey evaluation was done to insure that survey questions were pertinent and clear. Though ideally a survey instrument should be pretested with a population identical to that in the main study, it was impossible to do so because the respondent population was so

small and worked so closely together (Bradshaw and Zobin 1987, 65). The questionnaires were hand- carried to the respondents, and anonymity in their responses was guaranteed to them.

The analysis of the survey responses proved interesting. The survey response rate was a surprisingly high 76% . Seventeen surveys were distributed, with 13 completed and returned. The high response rate may indicate that the respondents felt that their input to the study would be an important factor in stimulating change within the organization. This is just speculation, however, and cannot be substantiated from the data gathered.

The responses to the surveys given to the surgeons/anesthesiologist are presented in Appendix G. Because some respondents provided more than one answer to a question, the total percentage of responses regarding a question may exceed 100% . A detailed analysis of selected responses is provided below.

Perhaps most important, 85% of the respondents indicated that they felt it would be feasible to establish a same-day surgery program at GLWACH (Question #6). Additionally, 92% indicated that they would support the establishment of such a program (Question #7). As reflected in the survey responses, inexperience with the modality would likely not preclude the establishment of a program. Ninety-two percent of the respondents considered themselves experienced with regard to

same-day surgery (Question #2).

The surgeons' responses to questions involving resource issues were the most surprising. The concern for cost containment reflected by the responses was interesting in that there is no real incentive for the military physician to be resource conscious. For example, 85% of the respondents felt that the economic use of resources was the most important reason in justifying the implementation of a same-day surgery program in a military hospital (Question #8). Likewise, 85% of the respondents indicated that the primary advantage to be gained in establishing a same-day surgery program was the reduction of costs (Question #9). Lastly, 77% of the respondents indicated that the condition which they felt warranted the establishment of a same-day surgery program was the forthcoming DRG-based resource allocation system (Question # 11).

When asked which of the procedures they were currently performing on an inpatient basis the respondents would like to perform in the same-day sugery modality, a substantial list was offered.

In summary, according the GLWACH surgical staff, the implementation of a same-day surgery program is feasible. Further, the staff would support such an endeavor out of what appears to be a concern for the efficient use of resources.

Same-day Surgery and Its Impact upon the Present System--MCCUs

GLWACH, as do all military hospitals, currently operates under a resource allocation system known as the MCCU. The MCCU, in addition to being a standard for estimating the cost of patient care being provided, is used as a method for determining dollar and staff allocations for a medical facility (Abshier 1989).

Under the MCCU system, when facilities generate increasing MCCU values above their programmed levels, they will receive increasing reimbursement from HSC. Sustained increases in MCCU values will also produce an increase in the MCCU reimbursement rate for future budgets (Abshier 1989).

The MCCU system provides a quick, if not easy, method for calculating a hospital's workload (Modderman 1987). The MCCU system affixes values to four basic patient care areas: (1) admissions, (2) live births, (3) occupied bed days, and (4) outpatient visits. In order to calculate the MCCU the following formula is applied:

MCCU = (10 x each admission)
+ (10 x each live birth)
+ (1 x each occupied bed day)
+ (.3 x each outpatient visit)

While the MCCU system is an easy system to use for participants at all levels (e.g., MEDDAC, HSC, and OTSG), it is not a very accurate measurement of actual work accomplishment. The MCCU system does not reflect the true

cost of patient care and, most importantly, does not account for the intensity of care being provided (Modderman 1987).

One recognizes the antiquated nature of the MCCU system when comparing it to the reimbursement method utilized in the private health sector--DRGs. In fact, the MCCU system appears to be the anithesis of prospective payment. With prospective payment, there is an incentive to the provider toward containing costs and keeping patient stays shorter. Conversely, with the MCCU system, the incentive is to admit patients and keep them as long as possible when adequate and appropriate care could be provided on an outpatient basis. The incentive with the MCCU system is to increase occupied bed days, which results in an increased MCCU value. The MCCU system, which is weighted so that inpatient care is rewarded over outpatient care, is obviously inefficient (Sewell 1987). There is an incentive to waste resources and thereby increase health care costs. Congress' mandating of DRGs upon the military health care system is an attempt to reverse the mind set that encourages and the behavior that results in inefficient utilization of resources in order to maximize MCCU values.

In order to determine the financial/funding implications of a same-day surgery program under the present resource allocation system, MCCUs, the actual MCCUs generated by a selected surgical procedure via the inpatient modality were compared with the MCCUs which would be generated by a same-day

surgery program.

The laparoscopy procedure performed at GLWACH was chosen to examine in order to demonstrate the divergence of the two resource allocation systems--MCCUs and DRGs. According to PASBA, the mean length of stay (LOS) for a laparoscopy at GLWACH for FY 1987 was 3.43 days (Cooper, 1988). Therefore, using the MCCU formula presented previously, the average laparoscopy done on an inpatient basis would generate 13 MCCUs (10 for admission + 3 for occupied bed days). Conversely, a laparoscopy performed in the same-day surgery modality would generate 11 MCCUs. The value of 11 is delineated in HSC Pam 40-7-3 (US, DA, HSC 1986). The orgranization is given 10 MCCUs for admitting the patient to the hospital and 1 for providing a bed during recovery. The patient is discharged later that same day but, for workload accountability purposes, receives an MCCU value of 11.

The example of the laparoscopy procedure applies to <u>all</u> surgeries which are done on an inpatient basis but which could be done in a same-day surgery program. Consequently, when looked at from the larger perspective, the potential loss of <u>vast quanities</u> of MCCUs, and the monies they represent, is obvious in a conversion to a same-day surgery program under the present resource allocation system (Sewell 1987).

The calculations for the laparoscopy provide a vivid illustration of the innacuracies of the MCCU system. While it should be apparent that same-day surgery uses less resources

than inpatient surgery, a MEDDAC with such a program is essentially penalized for providing care in an efficient manner. MTFs currently have an economic incentive to continue performing surgery on an inpatient basis in order to increase their occupied bed days, which in turn increases the MCCU value.

The MCCU system is largely responsible for the inefficient delivery of surgical care by many military hospitals. Currently, there is little incentive to behave efficiently as a military hospital (Sewell 1987). However, with the impending utililization of DRGs by the DOD, the economic incentive to become efficient appears to be at hand. Prospective pricing, or DRGs, is a system of incentives (Burda 1988, 28). Under a system of prospectively set rates, there is every incentive to economize and institute efficiencies (Eggers 1987, 29)

Financial/Funding Implications of Same-day Surgery under the DOD DRG-Based System

In order to determine the financial/funding implications of the same-day surgery program under the forthcoming DOD DRG-based resource allocation system, the top 30 (in terms of frequency) surgical procedures currently performed on an inpatient basis, but which are capable of being performed on a same-day surgery basis (Appendix H), were compared to their appropriate same-day surgery counterparts. Information regarding the DOD DRG-based resource allocation system was

obtained from the Health Care Studies Division of the United States Army Health Care Studies and Clinical Investigation Activity via PASBA, HSC. A listing of the DRGs with high and low cutoffs ("threshholds") in days for each was obtained from this activity (Appendix I). This listing was necessary because, as was stated earlier, those DRGs with a low threshhold of one day are most lucrative from the standpoint of resource allocation in the same-day surgery modality (Coventry 1988).

Procedures which are currently being done on an inpatient basis but which would be same-day surgery candidates were scrutinized to determine the DRG under which they would most likely fall. While it is understood that a single procedure can potentially fall under more than one DRG, utilizing historical data, the most likely DRG assignment can be determined (Apendix J). After it was determined under which DRG the surgical procedures were most likely to fall, the positive or negative funding/resource allocation implication was determined. The information used in the determination of the funding implication--the procedure number, the most likely DRG assignment, the threshhold, the LOS as an inpatient procedure in FY 88--is summarized at Table 5.

By examining one procedure in detail, the rationale for a positive or negative funding implication for all procedures can be understood. For example, in examining procedure number 5421 (fourth from top), the laparoscopy, one determines the

DRG under which it is most likely to fall, DRG 361, by refering to Appendix J. Next, the low cut-off, 1 day, is determined by refering to Appendix I. The LOS for the laparoscopy in FY 88 is determined by refering

Table 5

Top 30 Suggested Procedures - Funding Implications

Procedure Number	Likely DRG*	Low Cut-off	LOS > 1 day FY 88	Funding Implication
7535	467	1 day	6 cases	+
8512	262	1	42	+
2830	060	2		-
5421	361	1	55	+
1359	039	2		-
5300	162	2		-
5732	326	1	12	+
2820	059	2		-
5749	310/311	2		-
5733	311	2		-
8303	468	1	12	+
2239	053	2		-
8929	Not available	-	-	N/A
1511	041	1	11	+
5349	160	2		-
7510	384	1	2	+
7675	185	1	8	+
5359	160	2		-
0870	040	1	6	+
9353	254	1	5	+
8511	276	1	4	+
2309	187	1	5	+
5845	341	1	5	+
8331	227	1	5	+
2860	058/060	1	2	+
8339	227	1	3	+
7759	225	1	4	+
0460	008	1	4	+
3142	073	1	3	+
5850	313	2		-
2220	069/070	1	3	+

* based on which DRG the largest number of cases fell

to Appendix K. According to Appendix K, there were 55 cases in FY 88 in which the LOS for the laparoscopy procedure was greater than one day. Consequently, when looking at the laparoscopy in light of a same-day surgery program and DRGs, there is a positive funding implication. In other words, if those 55 cases were performed in the same-day surgery modality under the DOD DRG-based resource allocation system, funds/resources would be saved which could be utilized in other areas of the MEDDAC. The "payment" for DRG 361 would be approximately at the two-to-three day stay level, given a high cut-off of four days and a low cut-off of one day (Coventry 1988). Therefore, the resources saved by performing the procedure in the same-day modality, in this example at least one day's worth per case, could be used for other purposes. When looking at the positive funding implication over the course of 55 cases, and the many "days" of resources which they represent, the net savings would be significant.

While one must consider the potential for saving "days" of resources by utilizing the same-day surgery modality, perhaps more importantly one should consider the potential waste of resources by not doing so. DRGs reward efficiency. To perform procedures on an inpatient basis when they could be performed in the same-day modality is essentially wasting resources (bed days) which could be used elsewhere in the MEDDAC. There is an opportunity cost associated with every procedure which could be done in a same-day surgery program

but is not.

Of the 30 procedures examined (Table 5) in this study for a positive or negative funding implication, 20 procedures demonstrated a positive funding implication if performed in the same-day surgery modality. More significantly, these 20 procedures represent a large number of patient days of resources which could be saved (not expended) if done in a same-day surgery program. The incentive under prospective payment to economize and institute efficiencies is thus vividly depicted.

Departures From the Graduate Management Project Proposal

Unfortunately, the writer was not able to complete, in the manner planned, all that was intended in this project. While the primary departures have been briefly discussed in the pertinent sections of the study, this section will offer a further explanation of them. The writer has discussed the departures with the primary reader and many difficulties were, admittedly, because the writer's plans were too ambitous when preparing the proposal.

Originally, the writer had intended to survey same-day surgery candidates to assess their attraction to the modality. The writer, recognizing the popularity of the topic of same-day surgery, had planned to identify a valid and reliable instrument through a literature review. However, after an exhaustive literature review and many phone calls to potential

sources (e.g., the University of Michigan Library Survey Research Institute), an appropriate questionaire could not be located. Consequently, a surrogate measure of patient acceptance was utilized. The surrogate measure was the identification of both general literature and previously conducted studies specifically regarding patient acceptance of same-day surgery.

The writer had also intended to conduct standard interviews with the Chief of Surgery and the staff subordinate to him. However, after consultation with various staff members, it was decided that the interview questions would be standardized into a concise questionnaire. In other words, the questions, which would have been asked individually of each staff member, were asked instead in a written format. It is recognized that the results of the questionnaire, which was not tested for validity and reliability, are not generalizable to the general population. To have met with each staff member individually would have required many otherwise "productive" man-hours to be lost, on the part of both the surgical staff and the writer. Additionally, as it was pointed out to the writer, interviews with clinicians would likely have been marked with interruptions and consequently lacked focus. In summary, the most efficent manner to gain the desired information was to present the interview questions to each respondent in a written format. It seems that efficiency and productivity issues dictate even the conduct of research

studies--a lesson learned.

III. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

A study was conducted to determine the feasibility of establishing a same-day surgery program at GLWACH. Initially, a thorough literature review was conducted which highlighted the current and the projected importance of same-day surgery in the delivery of modern health care.

Following the literature review, personnel at the OTSG and HSC were contacted and information gathered from them concerning the establishment and operation of a same-day surgery program within the AMEDD. While the information elicited from these higher authorities was somewhat contradictory, it was nevertheless good "food for thought" for a decision as to the timing surrounding possible implementation of a program. In other words, one official, acknowledging the prudence of studying the possibility of a same-day surgery program, advised caution toward implementation "for the time being."

Other Army facilities possessing same-day surgery programs were contacted to determine concepts for establishing a same-day surgery program. The two facilities contacted each utilize an "integrated" system, in which the program shares personnel, operating room time, and all hospital facilities with the traditional surgical programs.

Additionally, difficulties experienced by existing same-day surgery programs were ascertained. While such difficulties as scheduling, staffing, etc., were surfaced, none were of such magnitude that they could not be overcome with planning and effective management. Further, as was discovered in the course of this study, ample literature exists that can assist in the resolving of many of these difficulties. Most important, potential difficulties have been identified and points of contact made which may be useful in the event a same-day surgery program at GLWACH is pursued.

A demand forecast, utilizing the exponential smoothing method, was completed which indicated that the current and the projected surgical volume at GLWACH are sufficient to justify the establishment of a same-day surgery unit. Utilizing PASBA automation capabilities, the number of cases currently performed on inpatients which could be expected to become same-day surgery cases was identified. According to the data, there was an average of approximately 184 potential same-day surgery cases per quarter over the last three years. The projection for the Second Quarter of FY 1989 was 188 cases.

The assessment of potential same-day surgery candidates' attraction to the same day surgery concept was accomplished through the use of a surrogate measure--literature review and referencing of previous studies. General literature concerning same-day surgery as well as studies specific to patient acceptance strongly suggest that patients will embrace

the modality.

When solicited for comments regarding their willingness to convert types of operative procedures currently done as inpatient cases to same-day surgery cases, the surgeons almost unanimously said they would be willing. Based upon the responses gathered, the surgeons would welcome the implementation of a surgery program. In fact, because their positive comments have now been solicited on the topic, it is likely that the surgeons have been co-opted into any decision made to implement a same-day surgery program.

A brief analysis was conducted of the funding implications of the implementation of a same-day surgery program under the present resource allocation system. The analysis indicated that a same-day surgery program will result in the loss of MCCUs and the funding associated with those MCCUs. In other words, the brief analysis performed suggests that it is not financially rewarding to institute a same-day surgery program under the current resource allocation system.

Lastly, an analysis of the funding implications of a same-day surgery program on the top 30 surgcial procedures performed at GLWACH under the forthcoming DOD DRG-based resource allocation system was performed. Of the 30 procedures examined, 20 indicated a positive financial implication under the DRG-based resource allocation system. In other words, as a result of a shorter length of stay, in 20 procedures, resources would be saved which could be used

elsewhere in the MEDDAC. The payment, or reimbursment, for the DRGs under which these procedures would fall would be for more than one day's stay, thereby resulting in a net funds gain for the MEDDAC. Thus, the financial incentive which has been the impetus for same-day surgery in the private sector has come to the military hospital.

RECOMMENDATIONS

GLWACH should plan for the implementation of a same-day surgery program. Based upon the conclusions just discussed and their application to a decision matrix (Appendix L) utilizing the criteria chosen for the study, the implementation of such a program appears feasible. In fact, not only does a same-day surgery program appear feasible, it seems that it will become a necessity in light of the forthcoming environment of fiscal restraint. A same-day surgery program will, as demonstrated in this study, conserve resources--resources which will need to be efficiently managed under the DRG-based resource allocation system.

The question of specifically when a same-day surgery program should be implemented requires further study. Given that military hospitals are only in the first year of a five-year conversion period to DRGs and are yet predominantly utilizing the MCCU system, the immediate implementation of a same-day surgery program may not be fiscally wise. Further, given the DOD's history of slippage with regard to the DRG implementation time table, a resource allocation system based

solely on DRGs may not materialize as soon as now thought. Certainly, however, when resources become predominantly allocated via DRGs, a same-day surgery program will require swift implementation. Consequently, it is important that developments with regard to DRGs in the military system be closely monitored while the planning for a same-day surgery program is begun concurrently. Finally, there is nothing to prohibit the implementation of a same-day surgery program in the near-term, as other MEDDACs have done. In so doing, not only would one be "ahead of the game," so to speak, one would have the opportunity to have become efficacious in operating a program before the fiscal environment essentially required it.

Presently, under cost reimbursement, or the MCCU system, there is little, if any, incentive to control costs. Under a system of prospectively set rates, there is every incentive to economize and institute efficiencies (Eggers 1987, 29). With DRGs, the organization as a whole takes financial responsibility for the quantity of care provided to a patient (Griffith 1987, 57). Reasoning contends that closer attention must now be paid to possible alternatives to inpatient care and that the trend toward less costly alternatives such as same-day surgery will continue (Eggers 1987, 33). Same-day surgery provides a real solution to the economic restraints facing the surgeon today (Lakhani, Leach, and Jarrett 1987, 629).

APPENDIX A

DEFINITIONS

DEFINITIONS

Autonomous hospital-based same-day surgery program: a same-day surgery unit located within, or physically attached to, a hospital. Ancillary services are shared; however, the same-day surgery program has operating room and facilities dedicated exclusively to same-day surgery.

Benchmark: A standard for evaluating accuracy.

Causal forecasting method: a forecasting method which attempts to find a relationship between the variable to be forecast and one or more other variables.

Exponential smoothing: A weighted moving average technique in which more weight is given to recent data.

Herniorrhaphy: surgical repair of a hernia.

Integrated hospital-based same-day surgery program: a program that shares personnel, operating room time, and all hospital facilities with the traditional surgical programs. This program does not function from the base of an identifiable same-day surgery center; rather, it is superimposed upon existing hospital facilities and programs.

Judgmental forecasting: subjective forecasting.

Laparoscopy: examination of the interior of the abdomen by means of a laparoscope.

Medicaid: a program of medical aid designed for those unable to afford regular medical service and financed jointly by the state and federal governments.

Medicare: a government program of medical care especially for the aged.

Moving average: The unweighted or weighted average of a consecutive number of data points. It can be used a forecast.

Naive model: A forecasting model in which the forecast for the next period is the same as the actual value of the time series this period.

Nosocomial infection: an infection pertaining to or originating in a hospital.

Same-day surgery: scheduled elective, uncomplicated surgical procedures provided to patients who do not remain overnight in the MTF. There is no deviation from the manner in which the surgical procedure is traditionally performed, but there is significant modification to both the preoperative and the postoperative care procedures. Also referred to as ambulatory surgery.

Smoothing parameter: A fraction of the error used to adjust the forecasts in exponential smoothing.

Warm-up sample: The first part of historical data used to compute starting values and select model parameters.

APPENDIX B

SUGGESTED PROCEDURES FOR SAME-DAY SURGERY FROM THE NINTH REVISION OF THE INTERNATIONAL CLASSIFICATION OF DISEASE, CLINICAL MODIFICATION (ICD-9-CM), VOLUME 3

SUGGESTED PROCEDURES FOR SAME DAY SURGERY

ICD-9-CM CODE	TITLE
1. OPERATIONS ON THE NERVOUS SYSTEM (01-05)	
04.2	Destruction of Cranial and Peripheral Nerves
04.3	Suture of Cranial and Peripheral Nerves
04.6	Transposition of Cranial and Peripheral Nerves
04.79	Other Neuroplasty
2. OPERATIONS ON THE ENDOCRINE SYSTEM (06-07)	
06.7	Excision of Thyroglossal Duct or Tract
3. OPERATIONS ON THE EYE (08-16)	
08.09	Other Incision of Eyelid
08.20	Removal of Lesion of Eyelid, Not Otherwise Specified
08.3	Repair of Blepharoptosis and Lid Retraction
08.49	Other Repair of Entropion or Ectropion
08.52	Blepharorrhaphy
08.59	Other Adjustment of Lid Position
08.63	Reconstruction of Eyelid with Hair Follicle Graft (Eyebrows and Eyelids)
08.70	Reconstruction of Eyelid, NOS (Blepharoplasty)
08.71	Reconstruction of Eyelid, Involving Lid Margin, Partial Thickness
08.89	Other Eyelid Repair
08.99	Other Operations on Eyelids
09.0	Incision of Lacrimal Gland
09.20	Excision of Larcimal Gland, Not Otherwise Specified
09.3	Other Operations on Lacrimal Gland
09.49	Other Manipulation of Lacrimal Passage
09.51	Incision of Lacrimal Punctum (Splitting of Lacrimal Papillae)
09.53	Incision of Lacrimal Sac
09.59	Other Incision of Lacrimal Passages
09.6	Excision of Lacrimal Sac and Passage
09.72	Other Repair of Punctum
09.73	Repair of Canaliculus
09.99	Other Operations on Lacrimal System

ICD-9-CM CODE	TITLE
10.0	Removal of Embedded Foreign Body From Conjunctiva by Incision
10.1	Other Incision of Conjunctiva
10.31	Excision of Lesion or Tissue of Conjunctiva
10.33	Curettage-Other Destructive Procedures on Conjunctiva
10.44	Mucosal Graft (Other Graft to Conjunctiva)
10.49	Other Conjunctivoplasty
10.5	Lysis of Adhesions of Conjunctiva and Eyelid
10.6	Repair of Laceration of Conjunctiva
10.99	Other Operations on Conjunctiva
11.0	Magnetic Removal of Embedded Foreign Body from Cornea
11.1	Incision of Cornea
11.31	Transportation of Pterygium
11.32	Excision of Pterygium with Corneal Graft
11.39	Other Excision of Pterygium
11.49	Other Removal or Destruction of Corneal Lesion
11.51	Suture of Corneal Laceration
11.60	Corneal Transplant, Not Otherwise Specified
11.61	Corneal Transplant, Lamellar Keratoplasty with Autograft
11.62	Other Lamellar Keratoplasty
11.63	Penetrating Keratoplasty with Autograft
11.64	Other Penetrating Keratoplasty, Perforating Keratoplasty (with Homograft)
11.69	Other Corneal Transplant
11.79	Other Reconstructive Surgery on Cornea
11.91	Tattooing of Cornea
11.92	Removal of Artificial Implant from Cornea
11.99	Other Operations on Cornea
12.01	Removal of Intraocular Foreign Body from Anterior Segment of Eye with Use of Magnet
12.11	Transfixion of Iris, Iridotomy
12.12	Other Iridotomy, Sphincterotomy of Iris
12.14	Other Iridectomy, Optical Iridectomy
12.31	Lysis of Goniosynechiae
12.32	Lysis of Other Anterior Synechiae
12.39	Other Iridoplasty

ICD-9-CM CODE	TITLE
12.40	Removal of Lesion of Anterior Segment of Eye
12.41	Destruction of Lesion of Iris, Nonexcisional
12.42	Iridocystectomy (Peripheral) Excision of Lesion of Iris
12.43	Destruction of Lesion of Ciliary Body Nonexcisional
12.44	Excision of Lesion of Ciliary Body
12.47	Diminution of Ciliary Body, NOS
12.51	Goniopuncture (Goniopuncture without Goniotomy)
12.54	Trabeculotomy (ab externo)
12.55	Cyclotomy, Cyclodiadlysis, Ciliarotomy
12.59	Other Facilitation of Intraocular Circulation
12.63	Iridencleisis and Iridotasis
12.65	Sclerectomy
12.69	Iridosclerotomy, Other Fistulizing Procedure
12.79	Other Glaucoma Procedures
12.81	Suture of Sclera
12.84	Excision or Destruction of Lesion of Sclera
12.89	Other Operations on Sclera
12.99	Other Operations on Anterior Chamber
13.01	Removal of Foreign Body from Lens with Use of Magnet
13.02	Removal of Foreign Body from Lens without Use of Magnet
13.19	Other Intracapsular Extraction of Lens
13.41	Phacoemulsification and Aspiration of Cataract
13.51	Extracapsular Extraction of Lens by Temporal Inferior Route (Capsulectomy)
13.59	Other Extracapsular Extraction of Lens
13.65	Excision of Secondary Membrane (After Cataract) (Capsulectomy)
13.69	Other Cataract Extraction
13.70	Insertion of Pseudophakos, Not Otherwise Specified
13.8	Removal of Implanted Lens
13.9	Other Operations on Lens
14.59	Other Repair of Retinal Detachment
14.75	Injection of Vitreous Substitute (See "Excludes")
14.79	Other Operations on Vitreous
15.11	Recession of One Extrocular Muscle
15.13	Resection of One Extraocular Muscle

ICD-9-CM CODE	TITLE
15.2	Other Operations on One Extraocular Muscle
15.22	Shortening Procedures on One Extraocular Muscle
15.3	Operations on Two More Extraocular Muscles Involving Temporary Detachment from Globe, One or Both Eyes
15.4	Other Operations on Two or More Extraocular Muscles, One or Both Eyes
15.5	Transposition of Extraocular Muscle
15.7	Repair of Injury of Extraocular Muscle
15.9	Other Operations on Extraocular Muscles and Tendons
16.1	Removal of Penetrating Foreign Body from Eye
4. OPERATIONS ON THE EAR (18-20)	
18.29	Excision or Destruction of Other Lesion of External Ear
18.5	Surgical Correction of Prominent Ear
18.6	Reconstruction of External Auditory Canal
18.71	Reconstructuon of Auricle of Ear
18.79	Other Plastic Repair of External Ear
18.9	Other Operations on External Ear
19.3	Other Operations on Ossicular Chain
19.4	Myringoplasty
20.09	Other Myringotomy
20.01	Myringotomy with Insertion of Tube (Insertion of Tympanotomy Tube)
20.1	Removal of Tympanostomy Tube
20.51	Excision of Lesion of Middle Ear (Excision of Cholesteatoma)
20.59	Other Excision of Middle Ear (Removal of Outer Attic Wall)
5. OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX (21-29)	
21.30	Excision or Destruction of Lesion of Nose
21.31	Polypectomy
21.61	Turbinectomy by Diathermy or Cryosurgery
21.62	Fracture of the Turbinates
21.69	Other Turbinectomy
21.71	Closed Reduction of Nasal Fracture
21.8	Repair and Plastic Operations on the Nose (Excludes 2183, Total Reconstruction)
21.99	Other Operations on Nose

ICD-9-CM CODE	TITLE
22.2	Intranasal Antrotomy
22.39	Other External Maxillary Antrotomy
22.60	Sinusectomy, Not Otherwise Specified
22.71	Closure of Nasal Sinus Fistula (Repair of Oro-Antral Fistula)
22.79	Other Repair of Nasal Sinus
23.01	Extraction of Deciduous Tooth
23.09	Extraction of Other Tooth
23.10	Other Surgical Extraction of Tooth
23.11	Removal of Residual Root
23.2	Restoration of Tooth by Filling
23.49	Other Dental Restoration
24.5	Alveoloplasty
24.91	Vestibuloplasty
25.01	Needle Biopsy of Tongue
25.02	Other Biopsy of Tongue
25.09	Other Diagnostic Procedures of Tongue
25.91	Lingual Frenotomy
26.0	Incision of Salivary Gland or Duct
26.99	Other Operations on Salivary Gland or Duct
27.24	Biopsy of Mouth, Unspecified Structure
27.56	Other Skin Graft to Lip and Mouth
27.59	Other Plastic Repair of Mouth
28.2	Tonsillectomy without Adenoidectomy
28.3	Tonsillectomy with Adenoidectomy
28.6	Adenoidectomy without Tonsillectomy
29.2	Excision of Branchial Cleft Cyst or Vestige (Only If Non-Infected)
6. OPERATIONS ON THE RESPIRATORY SYSTEM (30-34)	
30.09	Other Excision or Destruction of Lesion or Tissue of Larynx
31.0	Injection of Larynx
31.42	Laryngoscopy and other Tracheoscopy
33.24	Other Bronchoscopy
33.26	Percutaneous (Needle) Biopsy of Lung

ICD-9-CM CODE	TITLE
34.24	Pleural Biopsy
34.91	Thoracentesis
7. OPERATIONS ON THE CARDIOVASCULAR SYSTEM (35-39)	
37.85	Replacement of Cardiac Pacemaker Pulse Generator
38.50	Ligation and Stripping of Varicose Veins, Unspecified Site
38.59	Stripping Varicose Veins (Lower Limb)
38.92	Umbilical Vein Catheterization
38.93	Other Ve..us Catheterization
39.30	Suture o. Unspecified Blood Vessel
8. OPERATIONS ON THE HEMIC AND LYMPHATIC .YSTEM (40-41)	
40.11	Biopsy o. Lymphatic Structure
40.29	Simple E .ision of other Lymphatic Structure
41.31	Biopsy o. Bone Marrow
9. OPERATIONS ON THE DIGESTIVE SYSTEM (4? 54)	
42.24	Biopsy o. Esophagus
44.12	Gastrosc. y Through Artificial Stoma
44.13	Other Gas. roscopy
45.22	Endoscop; of Large Intestine through Stoma (Artificial)
45.24	Other End. scopy of Large Intestine
48.25	Other Bi. sy of Rectum
48.32	Other El. trocoagulation of Rectal Lesion or Tissue
48.35	Local Exc. sion of Rectal Lesion or Tissue
48.81	Incision .f Perirectal Tissue
49.10	Incision .r Excision of Anal Fistula
49.11	Anal Fist .lotomy
49.12	Anal Fist .lectomy
49.23	Biopsy of Anus
49.3	Local Exc .sion or Destruction of other Lesion or Tissue of Anus
49.46	Excision .f Hemorrhoids (Banding only)
49.51	Left Late .al Anal Sphincterotomy

ICD-9-CM CODE	TITLE
49.52	Posterior Anal Sphincterotomy
49.59	Other Anal Sphincterotomy
50.11	Percutaneous (Needle) Biopsy of Liver
53.00	Unilateral Repair of Inguinal Hernia, Not Otherwise Specified
53.10	Bilateral Repair of Inguinal Hernia, NOS
53.20	Unilateral Repair Femoral Hernia
53.30	Bilateral Repair of Femoral Hernia
53.4	Repair of Umbilical Hernia
53.41	Repair of Umbilical Hernia With Prosthesis
53.49	Other Umbilical Herniorrhaphy
53.59	Repair of other Hernia or Anterior Abdominal Wall
54.21	Laparoscopy
54.22	Biopsy of Abdominal Wall or Umbilicus
54.97	Injection of Locally-Acting Therapeutic Substance
54.98	Peritoneal Dialysis
54.99	Other Operations of Abdominal Region
	10. OPERATIONS ON THE URINARY SYSTEM (55-59)
55.01	Nephrotomy
55.11	Pyelotomy
55.22	Pyeloscopy
56.1	Ureteral Meatotomy
56.31	Ureteroscopy
56.99	Other Operations on Ureter
57.32	Other Cystoscopy
57.33	Transurethral Biopsy of Bladder
57.34	Other Biopsy of Bladder
57.49	Other Transurethral Excision or Destruction of Lesion or Tissue of Bladder
58.1	Urethral Meatotomy
58.23	Biopsy of Urethra
58.45	Repair of Hypospadias and Epispadias
58.5	Release of Urethral Stricture
58.6	Dilation of Urethra

ICD-9-CM CODE	TITLE
11. OPERATIONS ON THE MALE GENITAL SYSTEM (60-64)	
60.11	Needle Biopsy of Prostate
60.12	Other Biopsy of Prostate
61.2	Excision of Hydrocele (of Tunica Vaginalis)
62.11	Percutaneous Biopsy of Testis
62.12	Other Biopsy of Testis
62.3	Unilateral Orchiectomy
62.30	Unilateral Removal of Ovotestis
62.41	Removal of Both Testes at Same Operative Episode
62.42	Removal of Remaining Testis
62.5	Orchiopexy
63.30	Excision of Other Lesion or Tissue of Spermatic Cord and Epididymis (for Excision of Lesion)
63.1	Excision of Varicocele and Hydrocele of Spermatic Cord
63.59	Repair of Hydrocele of Cord
63.73	Vasectomy
64.0	Circumcision
64.11	Biopsy of Penis
64.41	Suture of Laceration of Penis
64.42	Release of Chordee
64.44	Reconstruction
64.49	Other Repair of Penis
64.93	Division of Penile Adhesions
64.98	Irrigation, Corpus Cavernosum
64.99	Other Operations on Male Genital Organs
12. OPERATIONS ON THE FEMALE GENITAL SYSTEM (65-71)	
66.2	Bilateral Endoscopic Destruction or Occulsion of Fallopian Tubes
69.01	D&C for Termination of Pregnancy
69.02	D&C Following Delivery or Abortion
69.09	Other D&C (Diagnostic)
69.51	Aspiration Curettage of Uterus for Termination of Pregnancy

ICD-9-CM CODE	TITLE
69.59	Other Aspiration Curettage of Uterus
69.97	Removal of Other Penetrating Foreign Body from Cervix
70.14	Other Vaginotomy (Removal of Foreign Body by Incision)
70.31	Excision of Hymen
70.33	Excision or Destruction of Lesion of Vagina
70.91	Other Operations on Vagina
71.11	Biopsy of Vulva
71.3	Other Local Excision or Destruction of Vulva and Perineum
71.71	Perineorrhapy
71.72	Closure of Perineal Fistula
71.79	Other Repair of Vulva and Perineum

13. OBSTETRICAL PROCEDURES (72-75)

14. OPERATIONS ON THE MUSCULO-SKELETAL SYSTEM (76-84)

76.01	Removal of sequestrum
76.09	Other Incision of Facial Bone
76.61	Closed Osteoplasty of Mandibular Ramus (Ramisection, Condylotomy)
76.62	Open Osteoplasty of Mandibular Ramus (Ramisection, Condylotomy)
76.67	Reduction Genioplasty
76.68	Augmentation Genioplasty
76.69	Other Facial Bone Repair
76.71	Closed Reduction of Malar and Zygomatic Fracture
76.73	Closed Reduction of Maxillary Fracture
76.75	Closed Reduction of Mandibular Fracture
76.78	Other Closed Reduction of Facial Fracture
77.20	Wedge Osteotomy Unspecified Site
77.30	Other Division of Bone, Osteotomy
77.54	Excision of Bunionette
77.59	Other Bunionectomy
77.60	Local Excision of Lesion or Tissue of Bone, Unspecified Site
77.68	Excision of Metatarsal Head or Phalanx
77.80	Other Partial Ostectomy, Unspecified Site (Hand and Foot only)
77.90	Total Ostectomy, Unspecified Site (Hand and Foot only)

ICD-9-CM CODE	TITLE
78.50	Internal Fixation of Bone Without Fracture Reduction
78.60	Removal of Internal Fixation Device, Unspecified Site (Superficial Only)
79.02	Closed Reduction of Fracture of Radius and Ulna Without Internal Fixation
79.03	Closed reduction of Fracture (Carpals and Metacarpals) Without Internal Fixation
79.04	Closed Reduction of Fracture Without Internal Fixation (Phalanges of Hand)
79.06	Closed Reduction of Fracture of Tibia and Fibula Without Internal Fixation
79.07	Closed Reduction of Fracture without Internal Fixation (Tarsals and Metatarsals)
79.12	Closed Reduction of Fracture with Internal Fixation Radius and Ulna
79.13	Closed Reduction of Fracture with Internal Fixation Carpals and Metacarpals
79.14	Closed Reduction of Fracture with Internal Fixation Phalanges of Hand
79.17	Closed Reduction of Fracture with Internal Fixation Tarsals and Metatarsals
79.18	Closed Reduction of Fracture with Internal Fixation Phalanges of Foot
79.2	Open Reduction of Fracture without Internal Fixation, (Hand and Foot only)
79.3	Open Reduction of Fracture with Internal Fixation, (Hand and Foot only)
79.7	Closed Reduction of Dislocation of Unspecified Site (Wrist, Hand, Ankle and Foot only)
80.10	Other Arthrotomy, Unspecified Site (Hand and Foot only)
80.20	Arthroscopy, Unspecified Site
80.30	Biopsy of Joint Structure, Unspecified Site
80.40	Division of Joint Capsule, Ligament, or Cartilage, (Arthroscopic, Hand and Foot only)
80.6	Excision of Semilunar Cartilage of Knee
80.70	Syndvectomy, Unspecified Site
80.80	Other Local Excision or Destruction of Lesion of Joint, (Arthroscopic only)
80.90	Other Excision of Joint, Unspecified Site (Arthroscopic only)
81.11	Ankle Fusion
81.20	Arthrodesis of Unspecified Joint (Hand and Foot Only)
81.79	Other Repair of Hand and Finger
81.96	Other Repair of Joint
82.0	Incision of Muscle, Tendon, Fascia, and Bursa of Hand
82.1	Division of Muscle, Tendon, Fascia on Hand
82.2	Excision of Lesion of Muscle, Tendon, and Fascia of Hand
82.3	Other Excision of Soft Tissue of Hand
82.4	Suture of Muscle, Tendon, and Fascia of Hand
82.7	Plastic Operation on Hand with Graft or Implant
82.8	Other Plastic Operations on Hand
82.84	Repair of Mallet Finger

ICD-9-CM CODE	TITLE
82.85	Other Tenodesis of Hand
82.86	Other Tenoplasty of Hand
82.89	Other Plastic Operations on Hand
82.89	Other Plastic Operations on Hand
82.9	Other Operations on Muscle, Tendon, and Fascia of Hand
83.0	Incision of Muscle, Tendon, Fascia, and Bursa
83.13	Other Tenotomy (Transection of Tendon)
83.14	Fasciotomy
83.19	Other Division of Soft Tissue
83.2	Diagnostic Procedures on Muscle, Tendon, Fascia, and Bursa, Including Hand
83.3	Excision of Lesion of Muscle, Tendon, Fascia, and Bursa
83.4	Other Excision of Muscle, Tendon, and Fascia, (Except Scalenectomy)
83.6	Suture of Muscle, Tendon, and Fascia
83.61	Suture of Tendon Sheath
83.62	Delayed Suture of Tendon
83.64	Other Suture of Tendon
83.8	Other Plastic Operations on Muscle, Tendon, and Fascia
83.9	Other Operations on Muscle, Tendon, Fascia, and Bursa
84.01	Amputation and Disarticulation of Finger
84.11	Amputation of Toe
84.3	Revision of Amputation Stump
15. OPERATIONS ON THE INTEGUMENTARY SYSTEM (85-86)	
85.0	Mastotomy
85.11	Percutaneous (Needle) Biopsy of Breast
85.12	Other Biopsy of Breast
85.20	Excision or Destruction of Breast Tissue
85.21	Local Excision of Lesion of Breast
85.24	Excision of Ectopic Breast Tissue (Excision of Supernumery Breast)
85.50	Augmentation Mammoplasty, Not Otherwise Specified
85.51	Unilateral Injection Into Breast for Augmentation
85.52	Injection into Breast for Augmentation (Bilateral)
85.53	Unilateral Breast Implant

ICD-9-CM CODE	TITLE
85.54	Bilateral Breast Implant
85.60	Mastopexy
85.81	Suture of Laceration of Breast
85.82	Split-Thickness Graft to Breast
85.83	Full-Thickness graft to breast
85.89	Other Mammoplasty
86.04	Other Incision with Drainage of Skin and Subcutaneous tissue (Drainage)
86.05	Incision with Removal of Foreign Body from Skin and Subcutaneous Tissue (Removal of Foreign Body)
86.09	Other Incision of Skin and Subacutaneous Tissue
86.11	Biopsy of Skin and Subcutaneous Tissue
86.21	Excision of Pilonidal Cyst or Sinus
86.22	Debridement of Wound, Infection, or Burn
86.23	Removal of Nail, Nailbed, or Nail Fold
86.24	Chemosurgery of Skin
86.25	Dermabrasion
86.3	Other Local Excision or Destruction of Lesion or Tissue of Skin and Subcutaneous Tissue
86.59	Suture of Skin and Subcutaneous Tissue of Other Sites
86.60	Free Skin Graft, Not Otherwise Specified
86.62	Other Skin Graft to Hand
86.75	Revision of Pedicle or Flap Graft
86.81	Repair for Facial Weakness
86.82	Facial Rhytidectomy
86.84	Relaxation of Scar or Web Contracture of Skin
86.85	Correction of Syndactyly
86.89	Other Repair and Reconstruction of Skin and Subcutaneous Tissue
86.99	Other Operations on Skin and Subcutaneous Tissue
16. MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES (87-99)	
87.54	Other Cholangiogram
87.52	Intravenous Cholangiogram
87.59	Cholecystogram

ICD-9-CM CODE	TITLE
88.45	Arteriography of Renal Arteries
89.29	Calibration of Urethra
93.26	Manual Rupture of Joint Adhesions
93.53	Application of other Cast
93.54	Application of Splint
96.03	Insertion of Esophageal Obturator Airway
96.16	Other Vaginal Dilation
96.23	Dialation of Anal Sphincter
96.24	Dilation and Manipulation of Enterostomy Stoma
97.71	Removal of Intrauterine Contraceptive Device
97.88	Removal of External Immobilization Device
98.0	Removal of Intraluminal Foreign Body from Digestive System without Incision
98.1	Removal of Intraluminal Foreign Body from Other Sites without Incision
98.2	Removal of other Foreign Body without Incision
98.06	Tamponade, Insertion of Sengstaken Tube
98.16	Removal of Intraluminal Foreign Body from Uterus without Incision
98.17	Removal of Intraluminal Foreign Body from Vagina without Incision
99.62	Other Electric Countershock of Heart

APPENDIX C

OFFICE OF THE SURGEON GENERAL POLICY LETTER

REGARDING SAME-DAY SURGERY

DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, DC 20310-2100

HQDA Ltr 40-86-6

REPLY TO ATTENTION OF

DASG-PSZ(M)(2 Dec 86)

31 December 1986

Expires 31 December 1988

SUBJECT: Same Day Surgery

SEE DISTRIBUTION

1. Reference.

a. Department of Defense Instruction 6025.8 (Same Day Surgery).

b. ICD-9-M (International Classification of Diseases, 9th Revision Clinical Modification, Volume 3).

c. AR 40-3 (Medical, Dental, and Veterinary Care).

d. AR 40-66 (Medical Record and Quality Assurance Administration).

2. This letter directs the implementation of same day surgery programs in Army medical treatment facilities (AMTFs)(Reference 1a above). Army policy is to encourage maximum use of same day surgery in AMTFs where it is cost effective to do so.

3. Commanders of AMTFs with appropriate facilities and resources will establish same day surgery programs consistent with the guidelines contained herein. Joint Commission on Accreditation of Hospitals (JCAH) standards and requirements will be incorporated into local plans. The attached list of suggested procedures will be used to assist in the selection of procedures which may be appropriate for inclusion in local programs. This list may be modified as dictated by local circumstances and clinical judgment. Program documentation must address as a minimum the areas listed below:

a. Patient selection criteria: The criteria for Class I and Class II patients as defined by the American Society of Anesthesiology will be used. Patients considered to be good candidates for same day surgery are those who--

(1) Are in general good health or have a systemic condition under good control.

(2) Have no organic psychiatric problems.

(3) Require the operation for a localized and not a systemic disturbance.

(4) Require surgical care that is more appropriately rendered on an inpatient rather than an outpatient basis in the surgical clinic.

(5) Will receive post-operative care in a recovery room and normally will be discharged from the hospital the same day.

(6) Have a responsible adult available at quarters to assist with unplanned medical followup care for 2 to 3 days following same day discharge.

b. Credentialing and quality assurance: Health providers conducting same day surgery will be credentialed in accordance with existing requirements. Since the clinical success of a same day surgery program depends on experienced judgment to select patients least likely to have delayed post-operative complications, and precise operative technique to prevent such complications, specific attention will be directed during the credentialing process to these elements of provider competence. Ongoing reviews of quality care will incorporate the medical records of those undergoing same day surgery, in order to give particular attention to events that may only be documented in the outpatient record.

c. Preoperative testing/operating and recovery room protocols, staffing, and organization: Local programs will formally address preoperative testing procedures. Specific protocols for same day surgery will be developed where they are not currently a part of existing operating and recovery room protocols. Staffing and organization requirements as needed will be coordinated and accomplished through appropriate command channels before initiation of same day surgery procedures.

d. Admission and admission procedures: The admission of same day surgery patients will be supplemented to provide for special requirements for same day surgery patients.

e. Medical records documentation, coding, and formats: Medical records documentation in same day surgery cases will be governed by the provisions of chapter 7, AR 40-66. The timely and proper completion of the documentation of same day surgery procedures like other hospital cases cannot be over emphasized. The coding of same day surgery procedures will be consistent with ICD-9-CM.

4. This letter becomes effective upon receipt. The provisions contained herein will be incorporated into the next revision to AR 40-3. Inspectors general will make same day surgery programs and this letter a topic of interest during annual inspections or staff assistance visits. Comments and recommendations for changes should be directed to HQDA(SGPS-CP), 5111 Leesburg Pike, Falls Church, VA 22041-3258.

DASG-PSZ
SUBJECT: Same Day Surgery

BY THE ORDER OF THE SECRETARY OF THE ARMY:

R. L. DILWORTH
Brigadier General, USA
The Adjutant General

Encl
Suggested Procedures for
Same Day Surgery.

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COMMANDERS
  US ARMY FORCES COMMAND
  US ARMY HEALTH SERVICES COMMAND
  US ARMY TRAINING AND DOCTRINE COMMAND
  EIGHTH US ARMY
  US ARMY, JAPAN
  US ARMY WESTERN COMMAND
SUPERINTENDENT
  US MILITARY ACADEMY

CF:
SEVENTH MEDICAL COMMAND
EIGHTEENTH MEDICAL COMMAND

APPENDIX D

SUGGESTED SAME-DAY SURGERIES BY QUARTER--

JANUARY 1986 TO DECEMBER 1988

REPORT C(1)

PAGE 1

SURGICAL PROCEDURES DATA
FT LEONARD WOOD
JAN - MAR 86

CODE	PROCEDURES ICD-9-CM	NUMBER
0870	RECONSTRUCTION OF EYELID, NOT OTHERWISE SPECIFIED	1
1359	OTHER EXTRACAPSULAR EXTRACTION OF LENS	6
2239	OTHER EXTERNAL MAXILLARY ANTROTOMY	1
2309	EXTRACTION OF OTHER TOOTH	7
2320	RESTORATION OF TOOTH BY FILLING	1
2820	TONSILLECTOMY WITHOUT ADENOIDECTOMY	4
2830	TONSILLECTOMY WITH ADENOIDECTOMY	6
2860	ADENOIDECTOMY WITHOUT TONSILLECTOMY	1
5300	UNILATERAL REPAIR OF INGUINAL HERNIA,NOT OTHERWISE SPECIFIED	9
5349	OTHER UMBILICAL HERNIORRHAPHY	3
5421	LAPAROSCOPY	9
5732	OTHER CYSTOSCOPY	15
5733	TRANSURETHRAL BIOPSY OF BLADDER	1
5749	OTH TRANSURETHRAL EXCISION,DESTRUCTION,BLADDER LESION,TISSUE	4
8314	FASCIOTOMY	1
8336	OTHER PLASTIC OPERATIONS ON TENDON	6
8511	PERCUTANEOUS (NEEDLE) BIOPSY OF BREAST	4
8512	OTHER BIOPSY OF BREAST	7
8929	OTHER NONOPERATIVE GENITOURINARY SYSTEM MEASUREMENTS	6
9353	APPLICATION OF OTHER CAST	5
		97

Data are subject to change as continuous updates to the data base occur.

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US Army Patient Administration Systems and Biostatistics Activity
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16 FEB 1989

SURGICAL PROCEDURES DATA
FT LEONARD WOOD
APR - JUN 88

CODE	PROCEDURES ICD-9-CM	NUMBER
870	RECONSTRUCTION OF EYELID, NOT OTHERWISE SPECIFIED	2
359	OTHER EXTRACAPSULAR EXTRACTION OF LENS	12
511	RECESSION OF ONE EXTRAOCULAR MUSCLE	2
309	EXTRACTION OF OTHER TOOTH	2
320	RESTORATION OF TOOTH BY FILLING	6
420	TONSILLECTOMY WITHOUT ADENOIDECTOMY	6
430	TONSILLECTOMY WITH ADENOIDECTOMY	8
500	ADENOIDECTOMY WITHOUT TONSILLECTOMY	4
142	LARYNGOSCOPY AND OTHER TRACHEOSCOPY	3
300	UNILATERAL REPAIR OF INGUINAL HERNIA,NOT OTHERWISE SPECIFIED	14
349	OTHER UMBILICAL HERNIORRHAPHY	3
359	REPAIR OF OTHER HERNIA OF ANTERIOR ABDOMINAL WALL	2
421	LAPAROSCOPY	11
732	OTHER CYSTOSCOPY	5
749	OTH TRANSURETHRAL EXCISION,DESTRUCTION,BLADDER LESION,TISSUE	1
510	DIAGNOSTIC AMNIOCENTESIS	1
675	CLOSED REDUCTION OF MANDIBULAR FRACTURE	2
303	BURSOTOMY	6
339	EXCISION OF LESION OF OTHER SOFT TISSUE	1
388	OTHER PLASTIC OPERATIONS ON TENDON	4
511	PERCUTANEOUS (NEEDLE) BIOPSY OF BREAST	1
512	OTHER BIOPSY OF BREAST	12
929	OTHER NONOPERATIVE GENITOURINARY SYSTEM MEASUREMENTS	132
353	APPLICATION OF OTHER CAST	3
		243

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16 FEB 1989

PCN: RUF-053

PAGE 3

SURGICAL PROCEDURES DATA
FT LEONARD WOOD
JUL - SEP 88

CODE	PROCEDURES	ICD-9-CM	NUMBER
359	OTHER EXTRACAPSULAR EXTRACTION OF LENS		10
511	RECESSION OF ONE EXTRAOCULAR MUSCLE		1
220	INTRANASAL ANTROTOMY		2
307	EXTRACTION OF OTHER TOOTH		2
320	RESTORATION OF TOOTH BY FILLING		3
520	TONSILLECTOMY WITHOUT ADENOIDECTOMY		5
530	TONSILLECTOMY WITH ADENOIDECTOMY		5
550	ADENOIDECTOMY WITHOUT TONSILLECTOMY		2
142	LARYNGOSCOPY AND OTHER TRACHEOSCOPY		2
500	UNILATERAL REPAIR OF INGUINAL HERNIA,NOT OTHERWISE SPECIFIED		20
421	LAPAROSCOPY		12
732	OTHER CYSTOSCOPY		7
749	OTH TRANSURETHRAL EXCISION,DESTRUCTION,BLADDER LESION,TISSUE		1
645	REPAIR OF HYPOSPADIAS OR EPISPADIAS		1
910	DIAGNOSTIC AMNIOCENTESIS		3
670	CLOSED REDUCTION OF MANDIBULAR FRACTURE		3
303	BURSOTOMY		6
314	FASCIOTOMY		3
331	EXCISION OF LESION OF TENDON SHEATH		1
368	OTHER PLASTIC OPERATIONS ON TENDON		2
511	PERCUTANEOUS (NEEDLE) BIOPSY OF BREAST		2
512	OTHER BIOPSY OF BREAST		9
929	OTHER NONOPERATIVE GENITOURINARY SYSTEM MEASUREMENTS		122
353	APPLICATION OF OTHER CAST		4
			228

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SURGICAL PROCEDURES DATA
FT LEONARD WOOD
OCT - DEC 88

CODE	PROCEDURES ICD-9-CM	NUMBER
1659	OTHER EXTRACAPSULAR EXTRACTION OF LENS	9
2220	INTRANASAL ANTROTOMY	2
2309	EXTRACTION OF OTHER TOOTH	5
2620	TONSILLECTOMY WITHOUT ADENOIDECTOMY	4
2630	TONSILLECTOMY WITH ADENOIDECTOMY	6
3142	LARYNGOSCOPY AND OTHER TRACHEOSCOPY	2
5300	UNILATERAL REPAIR OF INGUINAL HERNIA,NOT OTHERWISE SPECIFIED	13
5349	OTHER UMBILICAL HERNIORRHAPHY	3
5359	REPAIR OF OTHER HERNIA OF ANTERIOR ABDOMINAL WALL	1
5421	LAPAROSCOPY	22
5732	OTHER CYSTOSCOPY	13
5749	OTH TRANSURETHRAL EXCISION,DESTRUCTION,BLADDER LESION,TISSUE	1
7510	DIAGNOSTIC AMNIOCENTESIS	9
7675	CLOSED REDUCTION OF MANDIBULAR FRACTURE	1
8303	BURSOTOMY	5
8314	FASCIOTOMY	2
8331	EXCISION OF LESION OF TENDON SHEATH	1
8339	EXCISION OF LESION OF OTHER SOFT TISSUE	1
8388	OTHER PLASTIC OPERATIONS ON TENDON	2
8511	PERCUTANEOUS (NEEDLE) BIOPSY OF BREAST	1
8512	OTHER BIOPSY OF BREAST	21
8929	OTHER NONOPERATIVE GENITOURINARY SYSTEM MEASUREMENTS	113
9353	APPLICATION OF OTHER CAST	2
		239

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REPORT C(2)

PAGE 1

SURGICAL PROCEDURES DATA
FT LEONARD WOOD
JAN - MAR 87

CODE	PROCEDURES ICD-9-CM	NUMBER
1359	OTHER EXTRACAPSULAR EXTRACTION OF LENS	13
1511	RECESSION OF ONE EXTRAOCULAR MUSCLE	1
2309	EXTRACTION OF OTHER TOOTH	5
2320	RESTORATION OF TOOTH BY FILLING	5
5300	UNILATERAL REPAIR OF INGUINAL HERNIA,NOT OTHERWISE SPECIFIED	16
5349	OTHER UMBILICAL HERNIORRHAPHY	4
5359	REPAIR OF OTHER HERNIA OF ANTERIOR ABDOMINAL WALL	2
5421	LAPAROSCOPY	29
5732	OTHER CYSTOSCOPY	15
5733	TRANSURETHRAL BIOPSY OF BLADDER	3
5749	OTH TRANSURETHRAL EXCISION,DESTRUCTION,BLADDER LESION,TISSUE	4
5945	REPAIR OF HYPOSPADIAS OR EPISPADIAS	1
7510	DIAGNOSTIC AMNIOCENTESIS	1
7675	CLOSED REDUCTION OF MANDIBULAR FRACTURE	5
8303	BURSOTOMY	3
8314	FASCIOTOMY	1
8339	EXCISION OF LESION OF OTHER SOFT TISSUE	2
8385	OTHER PLASTIC OPERATIONS ON TENDON	2
8511	PERCUTANEOUS (NEEDLE) BIOPSY OF BREAST	3
8512	OTHER BIOPSY OF BREAST	26
8929	OTHER NONOPERATIVE GENITOURINARY SYSTEM MEASUREMENTS	69
9953	APPLICATION OF OTHER CAST	1
		211

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SURGICAL PROCEDURES DATA
FT LEONARD WOOD
APR - JUN 97

CODE	PROCEDURES ICD-9-CM	NUMBER
1359	OTHER EXTRACAPSULAR EXTRACTION OF LENS	5
1511	RECESSION OF ONE EXTRAOCULAR MUSCLE	3
5300	UNILATERAL REPAIR OF INGUINAL HERNIA,NOT OTHERWISE SPECIFIED	13
5349	OTHER UMBILICAL HERNIORRHAPHY	3
5359	REPAIR OF OTHER HERNIA OF ANTERIOR ABDOMINAL WALL	2
5421	LAPAROSCOPY	17
5732	OTHER CYSTOSCOPY	10
5749	OTH TRANSURETHRAL EXCISION,DESTRUCTION,BLADDER LESION,TISSUE	1
7510	DIAGNOSTIC AMNIOCENTESIS	1
7679	CLOSED REDUCTION OF MANDIBULAR FRACTURE	2
8303	BURSOTOMY	5
8331	EXCISION OF LESION OF TENDON SHEATH	2
8339	EXCISION OF LESION OF OTHER SOFT TISSUE	2
8386	OTHER PLASTIC OPERATIONS ON TENDON	1
8511	PERCUTANEOUS (NEEDLE) BIOPSY OF BREAST	1
8512	OTHER BIOPSY OF BREAST	10
8929	OTHER NONOPERATIVE GENITOURINARY SYSTEM MEASUREMENTS	7
9353	APPLICATION OF OTHER CAST	2
		87

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SURGICAL PROCEDURES DATA
FT LEONARD WOOD
JUL - SEP 87

CODE	PROCEDURES ICD-9-CM	NUMBER
1359	OTHER EXTRACAPSULAR EXTRACTION OF LENS	9
2220	INTRANASAL ANTROTOMY	1
2309	EXTRACTION OF OTHER TOOTH	2
2320	RESTORATION OF TOOTH BY FILLING	2
2630	TONSILLECTOMY WITH ADENOIDECTOMY	8
2650	ADENOIDECTOMY WITHOUT TONSILLECTOMY	1
3142	LARYNGOSCOPY AND OTHER TRACHEOSCOPY	3
5300	UNILATERAL REPAIR OF INGUINAL HERNIA,NOT OTHERWISE SPECIFIED	10
5349	OTHER UMBILICAL HERNIORRHAPHY	3
5359	REPAIR OF OTHER HERNIA OF ANTERIOR ABDOMINAL WALL	2
5421	LAPAROSCOPY	25
5732	OTHER CYSTOSCOPY	14
5733	TRANSURETHRAL BIOPSY OF BLADDER	2
5749	OTH TRANSURETHRAL EXCISION,DESTRUCTION,BLADDER LESION,TISSUE	5
5845	REPAIR OF HYPOSPADIAS OR EPISPADIAS	1
7510	DIAGNOSTIC AMNIOCENTESIS	1
7675	CLOSED REDUCTION OF MANDIBULAR FRACTURE	1
8303	BURSOTOMY	2
8331	EXCISION OF LESION OF TENDON SHEATH	1
8339	EXCISION OF LESION OF OTHER SOFT TISSUE	2
8388	OTHER PLASTIC OPERATIONS ON TENDON	2
8511	PERCUTANEOUS (NEEDLE) BIOPSY OF BREAST	3
8512	OTHER BIOPSY OF BREAST	12
8929	OTHER NONOPERATIVE GENITOURINARY SYSTEM MEASUREMENTS	15
9353	APPLICATION OF OTHER CAST	3
		130

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SURGICAL PROCEDURES DATA
FT LEONARD WOOD
OCT - DEC 87

CODE	PROCEDURES ICD-9-CM	NUMBER
1359	OTHER EXTRACAPSULAR EXTRACTION OF LENS	5
1511	RECESSION OF ONE EXTRAOCULAR MUSCLE	3
2220	INTRANASAL ANTROTOMY	4
2239	OTHER EXTERNAL MAXILLARY ANTROTOMY	2
2309	EXTRACTION OF OTHER TOOTH	4
2320	RESTORATION OF TOOTH BY FILLING	2
2490	ALVEOLOPLASTY	3
2820	TONSILLECTOMY WITHOUT ADENOIDECTOMY	3
2830	TONSILLECTOMY WITH ADENOIDECTOMY	13
2860	ADENOIDECTOMY WITHOUT TONSILLECTOMY	5
3142	LARYNGOSCOPY AND OTHER TRACHEOSCOPY	4
5300	UNILATERAL REPAIR OF INGUINAL HERNIA,NOT OTHERWISE SPECIFIED	4
5349	OTHER UMBILICAL HERNIORRHAPHY	4
5421	LAPAROSCOPY	12
5732	OTHER CYSTOSCOPY	14
5733	TRANSURETHRAL BIOPSY OF BLADDER	2
5749	OTH TRANSURETHRAL EXCISION,DESTRUCTION,BLADDER LESION,TISSUE	5
5845	REPAIR OF HYPOSPADIAS OR EPISPADIAS	1
7510	DIAGNOSTIC AMNIOCENTESIS	5
7675	CLOSED REDUCTION OF MANDIBULAR FRACTURE	3
8303	EXCISION OF LESION OF TENDON SHEATH	4
8314	FASCIOTOMY	1
8331	EXCISION OF LESION OF TENDON SHEATH	2
8339	EXCISION OF LESION OF OTHER SOFT TISSUE	7
8378	OTHER PLASTIC OPERATIONS ON TENDON	1
8511	PERCUTANEOUS (NEEDLE) BIOPSY OF BREAST	1
8512	OTHER BIOPSY OF BREAST	17
8929	OTHER NONOPERATIVE GENITOURINARY SYSTEM MEASUREMENTS	13
9353	APPLICATION OF OTHER CAST	7
		153

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16 FEB 1989

REPORT C(3)

PAGE 1

SURGICAL PROCEDURES DATA
FT LEONARD WOOD
JAN - MAR 88

CODE	PROCEDURES ICD-9-CM	NUMBER
0670	RECONSTRUCTION OF EYELID, NOT OTHERWISE SPECIFIED	1
1359	OTHER EXTRACAPSULAR EXTRACTION OF LENS	13
1511	RECESSION OF ONE EXTRAOCULAR MUSCLE	3
2220	INTRANASAL ANTROTOMY	1
2239	OTHER EXTERNAL MAXILLARY ANTROTOMY	7
2309	EXTRACTION OF OTHER TOOTH	1
2320	RESTORATION OF TOOTH BY FILLING	2
2450	ALVEOLOPLASTY	5
2820	TONSILLECTOMY WITHOUT ADENOIDECTOMY	7
2830	TONSILLECTOMY WITH ADENOIDECTOMY	12
2860	ADENOIDECTOMY WITHOUT TONSILLECTOMY	5
3142	LARYNGOSCOPY AND OTHER TRACHEOSCOPY	2
5300	UNILATERAL REPAIR OF INGUINAL HERNIA,NOT OTHERWISE SPECIFIED	5
5349	OTHER UMBILICAL HERNIORRHAPHY	1
5359	REPAIR OF OTHER HERNIA OF ANTERIOR ABDOMINAL WALL	4
5421	LAPAROSCOPY	39
5732	OTHER CYSTOSCOPY	12
5733	TRANSURETHRAL BIOPSY OF BLADDER	7
5749	OTH TRANSURETHRAL EXCISION,DESTRUCTION,BLADDER LESION,TISSUE	4
5845	REPAIR OF HYPOSPADIAS OR EPISPADIAS	2
7510	DIAGNOSTIC AMNIOCENTESIS	3
7535	OTHER DIAGNOSTIC PROCEDURES ON FETUS AND AMNION	86
7675	CLOSED REDUCTION OF MANDIBULAR FRACTURE	2
8303	BURSOTOMY	1
8331	EXCISION OF LESION OF TENDON SHEATH	1
8388	OTHER PLASTIC OPERATIONS ON TENDON	1
8511	PERCUTANEOUS (NEEDLE) BIOPSY OF BREAST	2
8512	OTHER BIOPSY OF BREAST	15
8929	OTHER NON-OPERATIVE GENITOURINARY SYSTEM MEASUREMENTS	6
9353	APPLICATION OF OTHER CAST	11
		266

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16 FEB 1999

SURGICAL PROCEDURES DATA
FT LEONARD WOOD
APR - JUN 88

CODE	PROCEDURES ICD-9-CM	NUMBER
0870	RECONSTRUCTION OF EYELID, NOT OTHERWISE SPECIFIED	3
1359	OTHER EXTRACAPSULAR EXTRACTION OF LENS	10
1511	RECESSION OF ONE EXTRAOCULAR MUSCLE	5
2220	INTRANASAL ANTROTOMY	2
2239	OTHER EXTERNAL MAXILLARY ANTROTOMY	3
2309	EXTRACTION OF OTHER TOOTH	4
2320	RESTORATION OF TOOTH BY FILLING	3
2800	TONSILLECTOMY WITHOUT ADENOIDECTOMY	5
2830	TONSILLECTOMY WITH ADENOIDECTOMY	30
2860	ADENOIDECTOMY WITHOUT TONSILLECTOMY	4
3142	LARYNGOSCOPY AND OTHER TRACHEOSCOPY	1
5300	UNILATERAL REPAIR OF INGUINAL HERNIA,NOT OTHERWISE SPECIFIED	4
5349	OTHER UMBILICAL HERNIORRHAPHY	4
5359	REPAIR OF OTHER HERNIA OF ANTERIOR ABDOMINAL WALL	2
5421	LAPAROSCOPY	18
5732	OTHER CYSTOSCOPY	5
5733	TRANSURETHRAL BIOPSY OF BLADDER	6
5749	OTH TRANSURETHRAL EXCISION,DESTRUCTION,BLADDER LESION,,TISSUE	6
7510	DIAGNOSTIC AMNIOCENTESIS	1
7535	OTHER DIAGNOSTIC PROCEDURES ON FETUS AND AMNION	101
7675	CLOSED REDUCTION OF MANDIBULAR FRACTURE	1
8303	BURSOTOMY	2
8314	FASCIOTOMY	1
8331	EXCISION OF LESION OF TENDON SHEATH	2
8339	EXCISION OF LESION OF OTHER SOFT TISSUE	1
8386	OTHER PLASTIC OPERATIONS ON TENDON	3
8611	PERCUTANEOUS (NEEDLE) BIOPSY OF BREAST	2
8612	OTHER BIOPSY OF BREAST	33
8929	OTHER NONOPERATIVE GENITOURINARY SYSTEM MEASUREMENTS	1
9953	APPLICATION OF OTHER CAST	5
		268

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Department of the Army
US Army Patient Administration Systems
and Biostatistics Activity
HSHI-OBS

16 FEB 1999

SURGICAL PROCEDURES DATA
FT LEONARD WOOD
JUL - SEP 88

CODE	PROCEDURES ICD-9-CM	NUMBER
0370	RECONSTRUCTION OF EYELID, NOT OTHERWISE SPECIFIED	3
1359	OTHER EXTRACAPSULAR EXTRACTION OF LENS	21
2220	INTRANASAL ANTROTOMY	2
2239	OTHER EXTERNAL MAXILLARY ANTROTOMY	3
2450	ALVEOLOPLASTY	1
2830	TONSILLECTOMY WITH ADENOIDECTOMY	12
2850	ADENOIDECTOMY WITHOUT TONSILLECTOMY	2
5300	UNILATERAL REPAIR OF INGUINAL HERNIA,NOT OTHERWISE SPECIFIED	5
5349	OTHER UMBILICAL HERNIORRHAPHY	3
5359	REPAIR OF OTHER HERNIA OF ANTERIOR ABDOMINAL WALL	1
5421	LAPAROSCOPY	2
5732	OTHER CYSTOSCOPY	7
5733	TRANSURETHRAL BIOPSY OF BLADDER	3
5749	OTH TRANSURETHRAL EXCISION,DESTRUCTION,BLADDER LESION,TISSUE	2
5845	REPAIR OF HYPOSPADIAS OR EPISPADIAS	2
7510	DIAGNOSTIC AMNIOCENTESIS	1
7539	OTHER DIAGNOSTIC PROCEDURES ON FETUS AND AMNION	54
7675	CLOSED REDUCTION OF MANDIBULAR FRACTURE	2
8303	BURSOTOMY	5
8314	FASCIOTOMY	3
8338	OTHER PLASTIC OPERATIONS ON TENDON	1
8511	PERCUTANEOUS (NEEDLE) BIOPSY OF BREAST	1
8512	OTHER BIOPSY OF BREAST	16
9353	APPLICATION OF OTHER CAST	6
		141

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US Army Patient Administration Systems
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HSHI-QBS
16 FEB 1989

SURGICAL PROCEDURES DATA
FT LEONARD WOOD
OCT - DEC 88

SOR	PROCEDURES	ICD-9-CM	NUMBER
770	RECONSTRUCTION OF EYELID, NOT OTHERWISE SPECIFIED		1
359	OTHER EXTRACAPSULAR EXTRACTION OF LENS		14
511	RECESSION OF ONE EXTRAOCULAR MUSCLE		1
220	INTRANASAL ANTROTOMY		1
239	OTHER EXTERNAL MAXILLARY ANTROTOMY		2
369	EXTRACTION OF OTHER TOOTH		1
320	RESTORATION OF TOOTH BY FILLING		1
450	ALVEOLOPLASTY		1
520	TONSILLECTOMY WITHOUT ADENOIDECTOMY		5
330	TONSILLECTOMY WITH ADENOIDECTOMY		12
360	ADENOIDECTOMY WITHOUT TONSILLECTOMY		1
142	LARYNGOSCOPY AND OTHER TRACHEOSCOPY		1
300	UNILATERAL REPAIR OF INGUINAL HERNIA, NOT OTHERWISE SPECIFIED		7
350	REPAIR OF OTHER HERNIA OF ANTERIOR ABDOMINAL WALL		4
421	LAPAROSCOPY		13
732	OTHER CYSTOSCOPY		13
733	TRANSURETHRAL BIOPSY OF BLADDER		2
410	DIAGNOSTIC AMNIOCENTESIS		1
535	OTHER DIAGNOSTIC PROCEDURES ON FETUS AND AMNION		61
573	CLOSED REDUCTION OF MANDIBULAR FRACTURE		2
814	FASCIOTOMY		2
831	EXCISION OF LESION OF TENDON SHEATH		2
868	OTHER PLASTIC OPERATIONS ON TENDON		3
512	OTHER BIOPSY OF BREAST		9
959	OTHER NONOPERATIVE GENITOURINARY SYSTEM MEASUREMENTS		2
893	APPLICATION OF OTHER CAST		3
			157

Data are subject to change as continuous updates to the data base occur.

24 FEB 1989

APPENDIX E

CHOOSING THE FIRST FORECAST AND ALPHA LEVEL

The warm up sample (periods 1 to 6) is used to compute the first forecast (F_1) and to choose α. The rule of the thumb is to choose F_1 as the mean of the warm-up sample. To choose α, a range of trial values must be tested. The "best fitting" α is the one that gives the minimum MSE in the warm up sample. Although α can be any number between 0 and 1, it is usually adequate to test only nine values: .1, .2, ..., .9.

To determine F_1 :

$$F_1 = 97 + 243 + 228 + 239 + 211 + 87 / 6 = 184$$

To determine α :

begin with trial value of .1

t	Data X_t	Forecast F_t	Error $e_t = X_t - F_t$	Forecast for t + 1 $F_{t+1} = F_t + \alpha e_t$
1	97	184	-87	$F_2 = 184 + .1(-87) = 175$
2	243	175	68	$F_3 = 175 + .1(68) = 182$
3	228	182	46	$F_4 = 182 + .1(46) = 187$
4	239	187	52	$F_5 = 187 + .1(52) = 192$
5	211	192	19	$F_6 = 192 + .1(19) = 194$
6	87	194	-107	

MSE (periods 1 to 6) $= 87^2 + 68^2 + 46^2 + 52^2 + 19^2 + 107^2 / 6$
$= 4803$

next, try trial value of .5

t	Data X_t	Forecast F_t	Error $e_t = X_t - F_t$	Forecast for t + 1 $F_{t+1} = F_t + \alpha e_t$
1	97	184	-87	$F_2 = 184 + .5(-87) = 141$
2	243	141	102	$F_3 = 141 + .5(102) = 192$
3	228	192	36	$F_4 = 192 + .5(36) = 210$
4	239	210	29	$F_5 = 210 + .5(29) = 225$
5	211	225	-14	$F_6 = 225 + .5(-14) = 218$
6	87	218	-131	

MSE (periods 1 to 6) $= 87^2 + 102^2 + 36^2 + 29^2 + 14^2 + 131^2 / 6$
$= 6245$

lastly, try trial value of .9

t	Data X_t	Forecast F_t	Error $e_t = X_t - F_t$	Forecast for t + 1 $F_{t+1} = F_t + \alpha e_t$
1	97	184	-87	$F_2 = 184 + .9(-87) = 106$
2	243	106	137	$F_3 = 106 + .9(137) = 229$
3	228	229	-1	$F_4 = 229 + .9(-1) = 228$
4	239	228	11	$F_5 = 228 + .9(11) = 238$
5	211	238	-27	$F_6 = 238 + .9(-27) = 214$
6	87	214	-127	

MSE (periods 1 to 6) $= 87^2 + 137^2 + 1^1 + 11^2 + 27^2 + 127^2 \ / \ 6$
$= 7220$

The MSE is lowest with the $\alpha = .1$

Therefore, choose α of .1

(note: one can discern the proper α without testing all nine trial values. By attempting the extreme values and a value in the middle, the proper α becomes apparent.)

APPENDIX F

STRUCTURED SURVEY FOR SOLICITING STAFF OPINIONS REGARDING SAME-DAY SURGERY

STRUCTURED SURVEY FOR SOLICITING STAFF OPINIONS
REGARDING SAME-DAY SURGERY

A research study is being conducted to determine the feasibility of establishing a same-day surgery program at General Leonard Wood Army Community Hospital. Completion of this survey will only require a few minutes of your time. Thank you for your cooperation.

QUESTIONS:

1. Have you ever performed surgery in a same-day surgery facility?

YES / NO

2. Do you consider yourself experienced with regard to the same-day surgery modality?

YES / NO

3. Do you consider yourself knowledgeable with regard to same-day surgery concepts and procedures?

YES / NO

4. If GLWACH possessed a same-day surgery program, would you recommend a patient to select the same-day surgery option?

YES / NO

5. Do you feel the patients you presently treat would choose the same-day surgery option if available to them?

YES / NO

6. Do you feel it would be feasible to establish a same-day surgery program at GLWACH?

YES / NO

IF NO, WHY NOT?

7. Would you support the establishment of a same-day surgery porgram at GLWACH?

YES / NO

8. Which one of the following reasons is most important in justifying implementation of a same-day surgery program in a military hospital?

a. Patient preference
b. Physician preference
c. Resource efficiency (economic use of resources)
d. Clinical effectiveness (clinically most sound)
e. Other _____

9. What do you feel is the primary advantage to be gained in establishing a same-day surgery program at GLWACH?

a. Patient's lifestyle only minimally changed.
b. Patient anxiety is lessened.
c. Costs are reduced (more efficient use of resources).
d. Less risk of nosocomial infection..
e. No advantage.
f. Other _____

10. What do you believe would be the primary disadvantage in establishing a same-day surgery program at GLWACH?

a. Patients may not adhere to preoperative instructions.
b. Patients may not have transportation to/from hospital.
c. Patients may not have competent assistance at home.
d. Reduced control over post-operative care of patient.
e. No disadvantage.
f. Other _____

11. Which conditions at GLWACH do you believe warrant establishment of a same-day surgery program? Circle one or more.

a. Trend in civilian hospitals toward expansion of same-day surgery programs.
b. Forthcoming DRG-based resource allocation system for military hospitals.
c. Current surgical workload.
d. Other _____

12. Which of the surgical procedures you are currently performing on an inpatient basis would you like to perform in the same-day surgery modality?

a.
b.
c.
d. None.

APPENDIX G

RESPONSES TO SURVEY

SOLICITING STAFF OPINIONS REGARDING SAME-DAY SURGERY

Responses to Survey Soliciting Staff Opinions Regarding Same-day Surgery

Question Number	Percentage Responding
1	85% yes 15% no
2	92% yes 8% no
3	100% yes 0% no
4	85% yes 15% no
5	92% yes 8% no
6	85% yes 15% no reasons not considered feasible include: - "I think the patients depend to much on our inpatient care (free service). ER is going to be overloaded with minor complications too." - "Our patients already are admitted the day before. Those that can, go home that night on pass, which in effect is how day surgery works."
7	92% yes 8% no
8	15% chose (a) 8% chose (b) 85% chose (c) 0% chose (d) 0% chose (e)
9	15% chose (a) 0% chose (b) 85% chose (c) 15% chose (d) 15% chose (e) 0% chose (f)

Question Number	Percentage Responding
10	30% chose (a) 30% chose (b) 30% chose (c) 46% chose (d) 23% chose (e) 15% chose (f) -- "other disadvantages" included: - "Change, the Army system responds poorly/slowly to change." - "Need separate facility to be able to manage immediate pre-op and post-op events. Need rapid admin or pre-admin phase."
11	46% chose (a) 77% chose (b) 15% chose (c) 15% chose (d) -- "other conditions" included: - "decrease in inpatient numbers for minor surgery." - "insurance cost savings are the motivation in the civilian sector."
12	responses included: - tubal ligation - arthroscopy - cataracts - carpal tunnel release - ganglion excisions - removal of retained/buried hardware - "90% podiatric medicine currently performed in civilian sector as same day - very cost effective and practical." - podiatry cases (forefoot) - D & C - minilaps BTL - cone biopsies - "majority of otorhinolarangology surgical cases" - inguinal hernia - pilonidal resection - needle loc. breast biopsy - simple eyelid surgeries - diagnostic laparoscopy - laser cone biopsy - laparoscopic surgery

APPENDIX H

TOP 30 SUGGESTED SAME-DAY SURGERIES

BY HIGHEST FREQUENCY, FISCAL YEAR 1988

REPORT B

TOP 30 SUGGESTED SAME DAY SURGERIES
BY HIGHEST FREQUENCY
FT LEONARD WOOD, FY88

TOP 31 PROCEDURES WIT
HIGHEST FREQUENCIES

RANK	OP CODE	PROCEDURE TITLE (ICPM)	DSPO
1	7535	OTHER DIAGNOSTIC PROCEDURES ON FETUS AND AMNION	239
2	8512	OTHER BIOPSY OF BREAST	75
3	2830	TONSILLECTOMY WITH ADENOIDECTOMY	67
4	5421	LAPAROSCOPY	64
5	1359	OTHER EXTRACAPSULAR EXTRACTION OF LENS	54
6	5300	UNILATERAL REPAIR OF INGUINAL HERNIA,NOT OTHERWISE SPECIFIED	17
7	5732	OTHER CYSTOSCOPY	17
8	2820	TONSILLECTOMY WITHOUT ADENOIDECTOMY	15
9	5749	OTH TRANSURETHRAL EXCISION,DESTRUCTION,BLADDER LESION,TISSUE	13
10	5733	TRANSURETHRAL BIOPSY OF BLADDER	13
11	8303	BURSOTOMY	12
12	2239	OTHER EXTERNAL MAXILLARY ANTROTOMY	12
13	8929	OTHER NONOPERATIVE GENITOURINARY SYSTEM MEASUREMENTS	11
14	1511	RECESSION OF ONE EXTRAOCULAR MUSCLE	10
15	5349	OTHER UMBILICAL HERNIORRHAPHY	9
16	7510	DIAGNOSTIC AMNIOCENTESIS	8
17	7675	CLOSED REDUCTION OF MANDIBULAR FRACTURE	8
18	5359	REPAIR OF OTHER HERNIA OF ANTERIOR ABDOMINAL WALL	7
19	0870	RECONSTRUCTION OF EYELID, NOT OTHERWISE SPECIFIED	7
20	9353	APPLICATION OF OTHER CAST	6
21	8511	PERCUTANEOUS (NEEDLE) BIOPSY OF BREAST	6
22	2309	EXTRACTION OF OTHER TOOTH	6
23	5845	REPAIR OF HYPOSPADIAS OR EPISPADIAS	5
24	8331	EXCISION OF LESION OF TENDON SHEATH	5
25	2860	ADENOIDECTOMY WITHOUT TONSILLECTOMY	4
26	8339	EXCISION OF LESION OF OTHER SOFT TISSUE	4
27	7759	OTHER BUNIONECTOMY	4
28	0460	TRANSPOSITION OF CRANIAL AND PERIPHERAL NERVES	4
29	3142	LARYNGOSCOPY AND OTHER TRACHEOSCOPY	3
30	5850	RELEASE OF URETHRAL STRICTURE	3
31	2220	INTRANASAL ANTROTOMY	3
		TOTAL	711

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07 MAR 1989

APPENDIX I

DRG THRESHHOLDS

REPORT F

	DIAGNOSES RELATED GROUPS OUTLIER THRESHHOLDS	LOWER LIMITS	UPPER LIMITS
1	CRANIOTOMY AGE >17 EXCEPT FOR TRAUMA	7	39
2	CRANIOTOMY FOR TRAUMA AGE >17	2	27
3	CRANIOTOMY AGE <18	3	28
4	SPINAL PROCEDURES	3	28
5	EXTRACRANIAL VASCULAR PROCEDURES	3	25
6	CARPAL TUNNEL RELEASE	1	4
7	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC AGE >69 &/OR C. C	2	27
8	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC AGE <70 W/O C. C.	1	11
9	SPINAL DISORDERS & INJURIES	1	21
10	NERVOUS SYSTEM NEOPLASMS AGE >69 AND/OR C. C.	1	23
11	NERVOUS SYSTEM NEOPLASMS AGE <70 W/O C. C.	1	21
12	DEGENERATIVE NERVOUS SYSTEM DISORDERS	1	21
13	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA	1	21
14	SPECIFIC CEREBROVASCULAR DISORDERS EXCEPT TIA	2	23
15	TRANSIENT ISCHEMIC ATTACKS AND PRECEREBRAL OCCLUSIONS	1	14
16	NONSPECIFIC CEREBROVASCULAR DISORDERS WITH C. C.	2	23
17	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O C. C.	1	21
18	CRANIAL & PERIPHERAL NERVE DISORDERS AGE >69 AND/OR C. C.	2	22
19	CRANIAL & PERIPHERAL NERVE DISORDERS AGE <70 W/O C. C.	1	20
20	NERVOUS SYSTEM INFECTION EXCEPT VIRAL MENINGITIS	2	23
21	VIRAL MENINGITIS	2	8
22	HYPERTENSIVE ENCEPHALOPATHY	1	20
23	NONTRAUMATIC STUPOR & COMA	1	14
24	SEIZURE & HEADACHE AGE >69 AND/OR C. C.	1	20
25	SEIZURE & HEADACHE AGE 18-69 W/O C. C.	1	13
26	SEIZURE & HEADACHE AGE 0-17	1	5
27	TRAUMATIC STUPOR & COMA, COMA>1 HR	1	7
28	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >69 AND/OR C. C.	1	16
29	TRAUMATIC STUPOR & COMA <1 HR AGE 18-69 W/O C. C.	1	5
30	TRAUMATIC STUPOR & COMA <1 HR AGE 0-17	1	2
31	CONCUSSION AGE >69 AND/OR C. C.	1	7
32	CONCUSSION AGE 18-69 W/O C. C.	1	3
33	CONCUSSION AGE 0-17	1	1
34	OTHER DISORDERS OF NERVOUS SYSTEM AGE >69 AND/OR C. C.	1	21
35	OTHER DISORDERS OF NERVOUS SYSTEM AGE <70 W/O C. C.	1	19
36	RETINAL PROCEDURES	2	23
37	ORBITAL PROCEDURES	1	16
38	PRIMARY IRIS PROCEDURES	1	13
39	LENS PROCEDURES WITH OR WITHOUT VITRECTOMY	2	4
40	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	1	5
41	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE 0-17	1	2
42	INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS + LENS	2	21
43	HYPHEMA	2	12
44	ACUTE MAJOR EYE INFECTIONS	2	9
45	NEUROLOGICAL EYE DISORDERS	1	15
46	OTHER DISORDERS OF THE EYE AGE >17 WITH C.C	1	17
47	OTHER DISORDERS OF THE EYE AGE >17 W/O C.C	1	11
48	OTHER DISORDERS OF THE EYE AGE 0-17	1	6
49	MAJOR HEAD & NECK PROCEDURES	4	37
50	SIALOADENECTOMY	2	9
51	SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY	2	11
52	CLEFT LIP & PALATE REPAIR	2	10

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53	SINUS & MASTOID PROCEDURES AGE >17	2	8
54	SINUS & MASTOID PROCEDURES AGE 0-17	1	7
55	MISCELLANEOUS EAR, NOSE & THROAT PROCEDURES	1	5
56	RHINOPLASTY	1	5
57	T & A PROC EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE>17	1	7
58	T & A PROC EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY,AG 0-17	1	3
59	TONSILLECTOMY AND/OR ADENOIDECTOMY ONLY AGE >17	2	5
60	TONSILLECTOMY AND/OR ADENOIDECTOMY ONLY AGE 0-17	2	3
61	MYRINGOTOMY WITH TUBE INSERTION AGE >17	1	4
62	MYRINGOTOMY WITH TUBE INSERTION AGE 0-17	1	1
63	OTHER EAR, NOSE & THROAT O.R. PROCEDURES	1	21
64	EAR, NOSE & THROAT MALIGNANCY	1	22
65	DISEQUILIBRIUM	1	13
66	EPISTAXIS	1	9
67	EPIGLOTTITIS	1	13
68	OTITIS MEDIA & URI AGE >69 AND/OR C. C.	1	9
69	OTITIS MEDIA & URI AGE 18-69 W/O C. C.	1	5
70	OTITIS MEDIA & URI AGE 0-17	1	5
71	LARYNGOTRACHEITIS	1	4
72	NASAL TRAUMA & DEFORMITY	1	4
73	OTHER EAR, NOSE & THROAT DIAGNOSES AGE >17	1	8
74	OTHER EAR, NOSE & THROAT DIAGNOSES AGE 0-17	1	5
75	MAJOR CHEST PROCEDURES	5	30
76	OTHER RESPIRATORY SYSTEM O.R. PROCEDURES WITH C. C.	4	31
77	OTHER RESPIRATORY SYSTEM O.R. PROCEDURES W/O C. C.	1	23
78	PULMONARY EMBOLISM	2	23
79	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >69 AND/OR C. C.	3	27
80	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE 18-69 W/O C. C.	2	24
81	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE 0-17	1	15
82	RESPIRATORY NEOPLASMS	1	22
83	MAJOR CHEST TRAUMA AGE >69 AND/OR C.C.	2	22
84	MAJOR CHEST TRAUMA AGE <70 W/O C. C.	1	8
85	PLEURAL EFFUSION AGE >69 AND/OR C. C.	1	21
86	PLEURAL EFFUSION AGE <70 W/O C. C.	1	20
87	PULMONARY EDEMA & RESPIRATORY FAILURE	1	21
88	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	2	19
89	SIMPLE PNEUMONIA & PLEURISY AGE >69 AND/OR C. C.	2	20
90	SIMPLE PNEUMONIA & PLEURISY AGE 18-69 W/O C. C.	2	9
91	SIMPLE PNEUMONIA & PLEURISY AGE 0-17	1	7
92	INTERSTITIAL LUNG DISEASE AGE >69 AND/OR C. C.	2	22
93	INTERSTITIAL LUNG DISEASE AGE <70 W/O C. C.	1	20
94	PNEUMOTHORAX AGE >69 AND/OR C. C.	2	23
95	PNEUMOTHORAX AGE <70 W/O C. C.	2	15
96	BRONCHITIS & ASTHMA AGE >69 AND/OR C. C.	2	14
97	BRONCHITIS & ASTHMA AGE 18-69 W/O C. C.	1	9
98	BRONCHITIS & ASTHMA AGE 0-17	1	6
99	RESPIRATORY SIGNS & SYMPTOMS AGE >69 AND/OR C. C.	1	17
100	RESPIRATORY SIGNS & SYMPTOMS AGE <70 W/O C. C.	1	9

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101	OTHER RESPIRATORY SYSTEM DIAGNOSES AGE >69 AND/OR C. C.	1	21
102	OTHER RESPIRATORY SYSTEM DIAGNOSES AGE <70 WITHOUT C. C.	1	9
103	HEART TRANSPLANT	.	.
104	CARDIAC VALVE PROCEDURE WITH PUMP & WITH CARDIAC CATH	8	41
105	CARDIAC VALVE PROCEDURE WITH PUMP & W/O CARDIAC CATH	9	35
106	CORONARY BYPASS WITH CARDIAC CATH	9	36
107	CORONARY BYPASS W/O CARDIAC CATH	8	29
108	OTHER CARDIOVASCULAR OR THORACIC PROC, WITH PUMP	3	26
109	CARDIOTHORACIC PROCEDURES W/O PUMP	2	25
110	MAJOR RECONSTRUCTIVE VASCULAR PROCEDURES AGE >69 AND/OR C. C.	6	34
111	MAJOR RECONSTRUCTIVE VASCULAR PROCEDURES AGE <70 W/O C. C.	7	27
112	VASCULAR PROCEDURES EXCEPT MAJOR RECONSTRUCTION W/O PUMP	2	25
113	AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB & TOE	12	45
114	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	3	29
115	PERM CARDIAC PACEMAKER IMPLANT WITH AMI, HEART FAILURE OR SHOCK	1	23
116	PERM CARDIAC PACEMAKER IMPLANT W/O AMI, HEART FAILURE OR SHOCK	2	24
117	CARDIAC PACEMMAKER REPLACE & REVIS EXC GEN REPL	2	15
118	CARDIAC PACEMAKER PULSE GENERATOR REPLACEMENT	2	20
119	VEIN LIGATION & STRIPPING	2	9
120	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	1	26
121	CIRCULATORY DISORDERS WITH AMI & C.V. COMP. DISCH. ALIVE	2	25
122	CIRCULATORY DISORDERS WITH AMI W/O C.V. COMP. DISCH. ALIVE	2	23
123	CIRCULATORY DISORDERS WITH AMI, EXPIRED	1	19
124	CIRCULATORY DISORDERS EXC AMI, WITH CARD CATH & COMPLEX DIAG	2	23
125	CIRCULATORY DISORDERS EXC AMI, WITH CARD CATH W/O COMPLEX DIAG	1	13
126	ACUTE & SUBACUTE ENDOCARDITIS	2	29
127	HEART FAILURE & SHOCK	2	20
128	DEEP VEIN THROMBOPHLEBITIS	4	23
129	CARDIAC ARREST, UNEXPLAINED	1	20
130	PERIPHERAL VASCULAR DISORDERS AGE >69 AND/OR C. C.	2	21
131	PERIPHERAL VASCULAR DISORDERS AGE <70 W/O C. C.	1	18
132	ATHEROSCLEROSIS AGE >69 AND/OR C. C.	1	16
133	ATHEROSCLEROSIS AGE <70 W/O C. C.	1	14
134	HYPERTENSION	1	12
135	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >69 AND/OR C. C.	1	21
136	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE 18-69 W/O C. C.	1	14
137	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE 0-17	1	13
138	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS AGE >69 AND/OR C. C.	1	14
139	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS AGE <70 W/O C. C.	1	9
140	ANGINA PECTORIS	1	10
141	SYNCOPE & COLLAPSE AGE >69 AND/OR C. C.	1	14
142	SYNCOPE & COLLAPSE AGE <70 W/O C. C.	1	10
143	CHEST PAIN	1	7
144	OTHER CIRCULATORY DIAGNOSES WITH C. C.	2	22
145	OTHER CIRCULATORY DIAGNOSES W/O C. C.	1	15
146	RECTAL RESECTION AGE >69 AND/OR C. C.	8	35
147	RECTAL RESECTION AGE <70 W/O C C.	7	30
148	MAJOR SMALL & LARGE BOWEL PROC..URES AGE >69 AND/OR C. C.	6	32
149	MAJOR SMALL & LARGE BOWEL PROCEDURES AGE <70 W/O C. C.	5	24
150	PERITONEAL ADHESIOLYSIS AGE >69 AND/OR C. C.	4	29
151	PERITONEAL ADHESIOLYSIS AGE <70 W/O C. C.	3	20
152	MINOR SMALL & LARGE BOWEL PROCEDURES AGE >69 AND/OR C. C.	1	20
153	MINOR SMALL & LARGE BOWEL PROCEDURES AGE <70 W/O C. C.	1	19

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54	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >69 AND/OR C. C.	2	27
55	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE 18-69 W/O C. C.	1	21
56	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE 0-17	2	11
57	ANAL AND STOMAL PROCEDURES AGE >69 AND/OR C. C.	1	18
58	ANAL AND STOMAL PROCEDURES AGE <70 W/O C. C.	1	10
59	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >69 AND/OR C.C.	2	18
60	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE 18-69 W/O C. C.	2	8
61	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >69 AND/OR C. C.	2	12
62	INGUINAL & FEMORAL HERNIA PROCEDURES AGE 18-69 W/O C. C.	2	7
63	HERNIA PROCEDURES AGE 0-17	1	3
64	APPENDECTOMY WITH COMPLICATED PRINC. DIAG AGE>69 AND/OR C. C.	6	24
65	APPENDECTOMY WITH COMPLICATED PRINC. DIAG AGE <70 W/O C. C.	4	16
66	APPENDECTOMY W/O COMPLICATED PRINC. DIAG AGE >69 AND/OR C. C.	3	18
67	APPENDECTOMY W/O COMPLICATED PRINC. DIAG AGE <70 W/O C. C.	2	7
68	MOUTH PROCEDURES AGE >69 AND/OR C.C.	2	24
69	MOUTH PROCEDURES AGE <70 W/O C.C.	2	12
70	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES AGE >69 AND/OR C. C.	2	27
71	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES AGE <70 W/O C. C.	1	15
72	DIGESTIVE MALIGNANCY AGE >69 AND/OR C. C.	1	22
73	DIGESTIVE MALIGNANCY AGE <70 W/O C. C.	1	20
74	G.I. HEMORRHAGE AGE >69 AND/OR C. C.	2	18
75	G.I. HEMORRHAGE AGE <70 W/O C. C.	1	11
76	COMPLICATED PEPTIC ULCER	1	13
77	UNCOMPLICATED PEPTIC ULCER >69 AND/OR C. C.	1	19
78	UNCOMPLICATED PEPTIC ULCER <70 W/O C. C.	1	8
79	INFLAMMATORY BOWEL DISEASE	1	21
80	G.I. OBSTRUCTION AGE >69 AND/OR C. C.	1	18
81	G.I. OBSTRUCTION AGE <70 W/O C. C.	1	12
82	ESOPHAGITIS, GASTROENT, & MISC. DIGEST. DIS AGE >69 &/OR C. C.	1	11
83	ESOPHAGITIS, GASTROENT. & MISC. DIGEST, DIS AGE 18-69 W/O C. C.	1	6
84	ESOPHAGITIS, GASTROENTERITIS & MISC. DIGEST. DISORDERS AGE 0-17	1	5
85	DENTAL & ORAL DIS, EXC EXTRACTIONS & RESTORATIONS, AGE >17	1	12
86	DENTAL & ORAL DIS, EXC EXTRACTIONS & RESTORATIONS, AGE 0-17	1	4
87	DENTAL EXTRACTIONS & RESTORATIONS	1	2
88	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >69 AND/OR C. C.	1	13
89	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 18-69 W/O C. C.	1	5
90	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 0-17	1	4
91	MAJOR PANCREAS, LIVER & SHUNT PROCEDURES	6	38
92	MINOR PANCREAS, LIVER & SHUNT PROCEDURES	8	41
93	BILIARY TRACT PROC EXC TOT CHOLECYSTECTOMY AGE >69 &/OR C. C.	5	34
94	BILIARY TRACT PROC EXC TOT CHOLECYSTECTOMY AGE <70 W/O C. C.	2	24
95	TOTAL CHOLECYSTECTOMY WITH C.D.E. AGE >69 AND/OR C. C.	7	24
96	TOTAL CHOLECYSTECTOMY WITH C.D.E. AGE <70 W/O C. C.	5	20
97	TOTAL CHOLECYSTECTOMY W/O C.D.E. AGE >69 AND/OR C. C.	4	19
98	TOTAL CHOLECYSTECTOMY W/O C.D.E. AGE <70 W/O C. C.	4	10
99	HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY	4	32
200	HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR NON-MALIGNANCY	1	21

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201	OTHER HEPATOBILIARY OR PANCREAS O.R. PROCEDURES	1	24
202	CIRRHOSIS & ALCOHOLIC HEPATITIS	2	23
203	MALIGNANCY OF HEPATOBILIARY SYSTEM OR PANCREAS	1	22
204	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	2	21
205	DISORDERS OF LIVER EXC MALIG, CIRR, ALC HEPA AGE >69 AND/OR CC	1	22
206	DISORDERS OF LIVER EXC MALIG, CIRR, ALC HEPA AGE <70 W/O C. C.	1	17
207	DISORDERS OF THE BILIARY TRACT AGE >69 AND/OR C. C.	1	19
208	DISORDERS OF THE BILIARY TRACT AGE <70 W/O C. C.	1	11
209	MAJOR JOINT AND LIMB REATTACHMENT PROCEDURES	10	35
210	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >69 AND/OR C. C.	8	40
211	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 18-69 W/O C. C.	4	30
212	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0-17	3	27
213	AMPUTATIONS FOR MUSCULOSKELETAL SYSTEM & CONN. TISSUE DISORDERS	1	26
214	BACK & NECK PROCEDURES AGE >69 AND/OR C. C.	7	37
215	BACK & NECK PROCEDURES AGE <70 W/O C. C.	5	30
216	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	21
217	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULOSKELETAL & CONN. TIS	1	25
218	LOWER EXTREM & HUMER PROC EXC HIP, FOOT, FEMUR AGE >69 &/OR CC	4	31
219	LOWER EXTREM & HUMER PROC EXC HIP, FOOT, FEMUR AGE 18-69 W/O CC	2	23
220	LOWER EXTREM & HUMER PROC EXC HIP, FOOT, FEMUR AGE 0-17	2	12
221	KNEE PROCEDURES AGE >69 AND/OR C. C.	2	26
222	KNEE PROCEDURES AGE <70 W/O C. C.	1	13
223	MAJOR SHOULDER/ELBOW PROC,OR OTHER UPPER EXTREMITY PROC WITH CC	2	14
224	SHOULDER,ELBOW OR FOREARM PROC,EXC MAJOR JOINT PROC, W/O CC	2	11
225	FOOT PROCEDURES	1	9
226	SOFT TISSUE PROCEDURES AGE >69 AND/OR C. C.	2	23
227	SOFT TISSUE PROCEDURES AGE <70 W/O C. C.	1	12
228	MAJOR THUMB OR JOINT PROC,OR OTH HAND OR WRIST PROC WITH CC	1	19
229	HAND OR WRIST PROC, EXCEPT MAJOR JOINT PROC, W/O CC	1	8
230	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES OF HIP & FEMUR	2	11
231	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES EXCEPT HIP & FEMUR	1	9
232	ARTHROSCOPY	1	7
233	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC AGE >69 &/OR CC	3	30
234	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC AGE <70 W/O CC	2	18
235	FRACTURES OF FEMUR	1	22
236	FRACTURES OF HIP & PELVIS	1	23
237	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH	1	21
238	OSTEOMYELITIS	1	23
239	PATHOLOGICAL FRACTURES & MUSCULOSKELETAL & CONN. TISS. MALIGNCY	1	21
240	CONNECTIVE TISSUE DISORDERS AGE >69 AND/OR C. C.	2	23
241	CONNECTIVE TISSUE DISORDERS AGE <70 W/O C. C.	1	21
242	SEPTIC ARTHRITIS	2	23
243	MEDICAL BACK PROBLEMS	1	21
244	BONE DISEASES & SEPTIC ARTHROPATHY AGE >69 AND/OR C. C.	1	21
245	BONE DISEASES & SEPTIC ARTHROPATHY AGE <70 W/O C. C.	1	19
246	NON-SPECIFIC ARTHROPATHIES	1	17
247	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE	1	16
248	TENDONITIS, MYOSITIS & BURSITIS	1	13
249	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	13
250	FX, SPRNS, STRNS & DISL OF FOREARM, HAND, FOOT AGE >69 &/OR CC	1	20
251	FX, SPRNS, STRNS & DISL OF FOREARM, HAND, FOOT AGE 18-69 W/O CC	1	8
252	FX, SPRNS, STRNS & DISL OF FOREARM, HAND, FOOT AGE 0-17	1	3

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253	FX, SPRNS, STRNS & DISL OF UPARM, LOWLEG EX FOOT AGE>69 +/OR CC	1	21
254	FX, SPRNS, STRNS & DISL OF UPARM, LOWLEG EX FOOT AGE 18-69 WOCC	1	10
255	FX, SPRNS, STRNS & DISL OF UPARM, LOWLEG EX FOOT AGE 0-17	1	5
256	OTHER DIAGNOSES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	13
257	TOTAL MASTECTOMY FOR MALIGNANCY AGE >69 AND/OR C. C.	6	21
258	TOTAL MASTECTOMY FOR MALIGNANCY AGE <70 W/O C. C.	5	16
259	SUBTOTAL MASTECTOMY FOR MALIGNANCY AGE >69 AND/OR C. C.	1	21
260	SUBTOTAL MASTECTOMY FOR MALIGNANCY AGE <70	1	8
261	BREAST PROC FOR NON-MALIG EXCEPT BIOPSY & LOC EXC	1	11
262	BREAST BIOPSY & LOCAL EXCISION FOR NON-MALIGNANCY	1	3
263	SKIN-GRAFTS &/OR DEBRID ULCER OR CELLULITIS AGE >69 AND/OR C.C.	3	36
264	SKIN-GRAFTS &/OR DEBRID ULCER OR CELLULITIS AGE <70 W/O C.C.	3	28
265	SKIN-GRAFT AND/OR DEBRID EXC SKIN ULCER OR CELLULITIS WITH C.C.	2	27
266	SKIN-GRAFT AND/OR DEBRID EXC SKIN ULCER OR CELLULITIS W/O C.C.	1	21
267	PERIANAL & PILONICAL PROCEDURES	2	11
268	SKIN, SUBCUTANEOUS TISSUE & BREAST PLASTIC PROCEDURES	1	10
269	OTHER SKIN, SUBCUT TISS & BREAST O.R. PROC AGE >69 &/OR C. C.	1	21
270	OTHER SKIN, SUBCUT TISS & BREAST O.R. PROC AGE <70 W/O C. C.	1	10
271	SKIN ULCERS	2	25
272	MAJOR SKIN DISORDERS AGE >69 AND/OR C. C.	2	22
273	MAJOR SKIN DISORDERS AGE <70 W/O C. C.	1	21
274	MALIGNANT BREAST DISORDERS AGE >69 AND/OR C. C.	1	22
275	MALIGNANT BREAST DISORDERS AGE <70 W/O C. C.	1	20
276	NON-MALIGNANT BREAST DISORDERS	1	5
277	CELLULITIS AGE >69 AND/OR C. C.	2	15
278	CELLULITIS AGE 18-69 W/O C. C.	2	11
279	CELLULITIS AGE 0-17	2	8
280	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >69 &/OR C. C.	1	10
281	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE 18-69 W/O C. C.	1	7
282	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE 0-17	1	5
283	MINOR SKIN DISORDERS AGE >69 AND/OR C. C.	1	18
284	MINOR SKIN DISORDERS AGE <70 W/O C. C.	1	8
285	AMPUTATIONS OF LOWER LIMB FOR ENDOCRINE, NUTRITIONAL&METABOL DI	13	46
286	ADRENAL & PITUITARY PROCEDURES	4	30
287	SKIN GRAFTS & WOUND DEBRIDE FOR ENDOC, NUTRIT & METAB DISORDERS	5	35
288	O.R. PROCEDURES FOR OBESITY	3	20
289	PARATHYROID PROCEDURES	3	16
290	THYROID PROCEDURES	3	10
291	THYROGLOSSAL PROCEDURES	1	8
292	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC AGE >69 &/ OR C. C.	3	28
293	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC AGE <70 W/O C. C.	1	15
294	DIABETES AGE =>36	2	17
295	DIABETES AGE 0-35	1	16
296	NUTRITIONAL & MISC. METABOLIC DISORDERS AGE >69 &/OR C. C.	1	21
297	NUTRITIONAL & MISC. METABOLIC DISORDERS AGE 18-69 W/O C. C.	1	21
298	NUTRITIONAL & MISC. METABOLIC DISORDERS AGE 0-17	1	14
299	INBORN ERRORS OF METABOLISM	1	14
300	ENDOCRINE DISORDERS AGE >69 AND/OR C. C.	1	22
301	ENDOCRINE DISORDERS AGE <70 W/O C. C.	1	18
302	KIDNEY TRANSPLANT	11	44
303	KIDNEY, URETER & MAJOR BLADDER PROCEDURE FOR NEOPLASM	6	32
304	KIDNEY, URETER & MAJ BLDR PROC FOR NON-MALIG AGE >69 &/OR C. C.	4	28

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305	KIDNEY, URETER & MAJ BLDR PROC FOR NON-MALIG <70 W/O C. C.	3	24
306	PROSTATECTOMY AGE >69 AND/OR C. C.	3	20
307	PROSTATECTOMY AGE <70 W/O C. C.	3	9
308	MINOR BLADDER PROCEDURES AGE >69 AND/OR C. C.	2	18
309	MINOR BLADDER PROCEDURES AGE <70 W/O C. C.	2	10
310	TRANSURETHRAL PROCEDURES AGE >69 AND/OR C. C.	2	13
311	TRANSURETHRAL PROCEDURES AGE <70 W/O C. C.	2	8
312	URETHRAL PROCEDURES, AGE >69 AND/OR C. C.	2	19
313	URETHRAL PROCEDURES, AGE 18-69 W/O C. C.	2	12
314	URETHRAL PROCEDURES, AGE 0-17	1	5
315	OTHER KIDNEY & URINARY TRACT O.R. PROCEDURES	2	26
316	RENAL FAILURE	1	7
317	ADMIT FOR RENAL DIALYSIS	1	1
318	KIDNEY & URINARY TRACT NEOPLASMS AGE >69 AND/OR C. C.	1	22
319	KIDNEY & URINARY TRACT NEOPLASMS AGE <70 W/O C. C.	1	14
320	KIDNEY & URINARY TRACT INFECTIONS AGE >69 AND/OR C. C.	2	16
321	KIDNEY & URINARY TRACT INFECTIONS AGE 18-69 W/O C. C.	2	10
322	KIDNEY & URINARY TRACT INFECTIONS AGE 0-17	1	9
323	URINARY STONES AGE >69 AND/OR C. C.	1	10
324	URINARY STONES AGE <70 W/O C. C.	1	6
325	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE>69 AND/OR C. C.	1	13
326	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 18-69 W/O C. C.	1	10
327	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 0-17	1	8
328	URETHRAL STRICTURE AGE >69 ND/OR C. C.	1	12
329	URETHRAL STRICTURE AGE 18-69 W/O C. C.	1	5
330	URETHRAL STRICTURE AGE 0-17	1	4
331	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >69 AND/OR C. C.	1	21
332	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 18-69 W/O C. C.	1	14
333	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 0-17	1	9
334	MAJOR MALE PELVIC PROCEDURES WITH C. C.	7	33
335	MAJOR MALE PELVIC PROCEDURES W/O C. C.	6	25
336	TRANSURETHRAL PROSTATECTOMY AGE >69 AND/OR C. C.	3	11
337	TRANSURETHRAL PROSTATECTOMY AGE <70 W/O C. C.	3	8
338	TESTES PROCEDURES, FOR MALIGNANCY	2	22
339	TESTES PROCEDURES, NON-MALIGNANT AGE >17	2	6
340	TESTES PROCEDURES, NON-MALIGNANT AGE 0-17	1	3
341	PENIS PROCEDURES	1	13
342	CIRCUMCISION AGE >17	1	4
343	CIRCUMCISION AGE 0-17	1	1
344	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY	2	22
345	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIG	1	6
346	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, AGE >69 AND/OR C. C.	1	21
347	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, AGE <70 W/O C. C.	1	20
348	BENIGN PROSTATIC HYPERTROPHY AGE >69 AND/OR C. C.	1	7
349	BENIGN PROSTATIC HYPERTROPHY AGE <70 W/O C. C.	1	3
350	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM	1	12
351	STERILIZATION, MALE	1	2
352	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES	1	7
353	PELVIC EVISCERATION, RADICAL HYSTERECTOMY & VULVECTOMY	5	33
354	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIGN AGE>69 OR CC	4	29
355	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIGN AGE<70 WO CC	3	16
356	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	4	11
357	UTERUS & ADENEXA PROCEDURES, FOR OVARIAN OR ADNEXAL MALIGNANCY	4	28

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358	UTERUS & ADENEXA PROC FOR NON-MALIGNANCY, AGE >69 OR CC	4	14
359	UTERUS & ADENEXA PROC FOR NON-MALIGNANCY, AGE <70 W/O CC	3	9
360	VAGINA, CERVIC & VULVA PROCEDURES	1	5
361	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	1	4
362	ENDOSCOPIC TUBAL INTERRUPTION	1	3
363	D & C, CONIZATION & RADIO-IMPLANT, FOR MALIGNANCY	1	6
364	D&C, CONIZATION EXCEPT FOR MALIGNANCY	1	3
365	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES	2	19
366	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM AGE >69 AND/OR C. C.	1	21
367	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM AGE <70 W/O C. C.	1	12
368	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM	2	9
369	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS	1	5
370	CESAREAN SECTION WITH C. C.	3	11
371	CESAREAN SECTION W/O C. C.	4	7
372	VAGINAL DELIVERY WITH COMPLICATING DIAGNOSES	2	8
373	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	2	4
374	VAGINAL DELIVERY WITH STERILIZATION AND/OR D&C	2	5
375	VAGINAL DELIVERY WITH O.R. PROC EXCEPT STERIL AND/OR D+C	2	5
376	POSTPARTUM AND POSTABORTION DIAGNOSES W/O O.R. PROCEDURE	1	8
377	POSTPARTUM AND POSTABORTION DIAGNOSES WITH O.R. PROCEDURE	1	7
378	ECTOPIC PREGNANCY	3	7
379	THREATENED ABORTION	1	6
380	ABORTION W/O D&C	1	4
381	ABORTION WITH D&C ASPIRATION CURETTAGE, OR HYSTEROTOMY	1	2
382	FALSE LABOR	1	5
383	OTHER ANTEPARTUM DIAGNOSES WITH MEDICAL COMPLICATIONS	1	8
384	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	1	5
385	NEONATES, DIED OR TRANSFERRED	1	19
386	EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROME, NEONATE	1	24
387	PREMATURITY WITH MAJOR PROBLEMS	2	23
388	PREMATURITY W/O MAJOR PROBLEMS	2	12
389	FULL TERM NEONATE WITH MAJOR PROBLEMS	2	11
390	NEONATES WITH OTHER SIGNIFICANT PROBLEMS	2	5
391	NORMAL NEWBORNS	2	4
392	SPLENECTOMY AGE >17	4	26
393	SPLENECTOMY AGE 0-17	4	18
394	OTHER O.R. PROCEDURES OF THE BLOOD + BLOOD FORMING ORGANS	1	12
395	RED BLOOD CELL DISORDERS AGE >17	1	17
396	RED BLOOD CELL DISORDERS AGE 0-17	1	10
397	COAGULATION DISORDERS	1	14
398	RETICULOENDOTHELIAL & IMMUNITY DISORDERS AGE >69 AND/OR C. C.	1	22
399	RETICULOENDOTHELIAL & IMMUNITY DISORDERS AGE <70 W/O C. C.	1	13
400	LYMPHOMA & LEUKEMIA WITH MAJOR O.R. PROCEDURE	3	33
401	LYMPHOMA & NON-ACUTE LEUKEMIA WITH OTHER O.R. PROC WITH CC	3	32
402	LYMPHOMA & NON-ACUTE LEUKEMIA WITH OTHER O.R. PROCEDURE W/O CC	1	21
403	LYMPHOMA & NON-ACUTE LEUKEMIA WITH CC	1	22
404	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC	1	19
405	ACUTE LEUKEMIA WITHOUT MAJOR O.R. PROCEDURED AGE 0-17	1	17
406	MYELOPROLIF DISORD OR POORLY DIFF NEOPLASM W MAJ O.R. PROC & CC	5	36
407	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W/O CC	1	23
408	MYELOPROLIF DISORD OR POORLY DIFF NEOPL WITH OTHER O.R. PROC	1	20

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409	RADIOTHERAPY	2	26
410	CHEMOTHERAPY	1	9
411	HISTORY OF MALIGNANCY W/O ENDOSCOPY	1	14
412	HISTORY OF MALIGNANCY WITH ENDOSCOPY	1	4
413	OTHR MYELOPROLIF DISORD OR POORLY DIFF NEOPL DX AGE>69 &/OR CC	1	23
414	OTHR MYELOPROLIF DISORD OR POORLY DIFF NEOPL DX AGE<70 W/O CC	1	20
415	O.R. PROCEDURE FOR INFECTIONS & PARASITIC DISEASES	2	25
416	SEPTECEMIA AGE >17	2	24
417	SEPTECEMIA AGE 0-17	1	12
418	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	2	17
419	FEVER OF UNKNOWN ORIGIN AGE >69 AND/OR C. C.	2	22
420	FEVER OF UNKNOWN ORIGIN AGE 18-69 W/O C. C.	1	17
421	VIRAL ILLNESS AGE >17	1	11
422	VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN AGE 0-17	1	6
423	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES	1	20
424	O.R. PROCEDURES WITH PRINCIPAL DIAGNOSIS OF MENTAL ILLNESS	1	24
425	ACUTE ADJUST REACT & DISTURBANCES OF PSYCHOSOCIAL DYSFUNCTION	1	20
426	DEPRESSIVE NEUROSES	1	22
427	NEUROSES EXCEPT DEPRESSIVE	1	21
428	DISORDERS OF PERSONALITY & IMPULSE CONTROL	1	22
429	ORGANIC DISTURBANCES & MENTAL RETARDATION	1	24
430	PSYCHOSES	2	29
431	CHILDHOOD MENTAL DISORDERS	1	20
432	OTHER DIAGNOSES OF MENTAL DISORDERS	1	20
433	ALCOHOL/DRUG USE AND INDUCED ORGANIC MENTAL DISORDERS, LEFT AMA	1	13
434	ALC/DRUG ABUSE,INTOX INDUCD MNTL SYN EXC DEPEND &/OR OTH SYMPT	1	22
435	ALCOHOL/DRUG DEPENDENCE, DETOX AND/OR OTHER SYMPTOMATIC TREATMT	2	29
436	ALCOHOL/DRUG DEPENDENCE WITH REHABILITATION THERAPY	3	34
437	ALCOHOL/DRUG DEPENDENCE, COMBINED REHABILITATION AND DETOX THER	3	36
438	NO LONGER VALID	.	.
439	SKIN GRAFTS FOR INJURIES	2	25
440	WOUND DEBRIGEMENTS FOR INJURIES	1	22
441	HAND PROCEDURES FOR INJURIES	1	21
442	OTHER O.R. PROCEDURES FOR INJURIES AGE >69 AND/OR C. C.	1	24
443	OTHER O.R. PROCEDURES FOR INJURIES AGE <70 W/O C. C.	1	20
444	MULTIPLE TRAUMA AGE >69 AND/OR C. C.	1	17
445	MULTIPLE TRAUMA AGE 18-69 W/O C. C.	1	10
446	MULTIPLE TRAUMA AGE 0-17	1	6
447	ALLERGIC REACTIONS AGE >17	1	4
448	ALLERGIC REACTIONS AGE 0-17	1	3
449	POISONING AND TOXIC EFFECTS OF DRUGS AGE >69 AND/OR C. C.	1	15
450	POISONING AND TOXIC EFFECTS OF DRUGS AGE 18-69 W/O C. C.	1	7
451	POISONING AND TOXIC EFFECTS OF DRUGS AGE 0-17	1	3
452	COMPLICATIONS OF TREATMENT AGE >69 AND/OR C. C.	1	21
453	COMPLICATIONS OF TREATMENT AGE <70 W/O C. C.	1	11
454	OTHER INJURIES, POISONINGS & TOXIC EFF DIAG AGE >69 AND/OR CC	1	11
455	OTHER INJURIES, POISONINGS & TOXIC EFF DIAG AGE <70 W/O CC	1	4
456	BURNS, TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	2	26
457	EXTENSIVE BURNS W/O OR PROCEDURE	1	22
458	NON-EXTENSIVE BURNS WITH SKIN GRAFTS	5	37

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459	NON-EXTENSIVE BURNS WITH WOUND DEBRIDEMENT OR OTHER O.R. PROC	2	22
460	NON-EXTENSIVE BURNS W/O O.R. PROCEDURE	1	20
461	O.R. PROC WITH DIAGNOSES OF OTHER CONTACT WITH HEALTH SERVICES	1	14
462	REHABILITATION	1	22
463	SIGNS & SYMPTOMS WITH C. C.	1	21
464	SIGNS & SYMPTOMS W/O C. C.	1	13
465	AFTERCARE WITH HISTORY OF MALIGNANCY AS SECONDARY DX	1	13
466	AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DX	1	4
467	OTHER FACTORS INFLUENCING HEALTH STATUS	1	4
468	UNRELATED OR PROCEDURE	1	21
469	PRIM DX INVALID AS DISCHARGE DIAGNOSIS	.	.
470	UNGROUPABLE	.	.
471	BILATERAL OR MULTIPLE MAJOR JOINT PROCEDURES OF LOWER EXTREM	28	61
472	EXTENSIVE BURNS WITH O.R. PROCEDURE	28	61
473	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE > 17	1	22

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APPENDIX J

DRGs FOR THE TOP 30

SUGGESTED SAME-DAY SURGERIES, FISCAL YEAR 1988

REPORT D

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 8512
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
259	SUBTOTAL MASTECTOMY FOR MALIGNANCY AGE >69 AND/OR CC	1
260	SUBTOTAL MASTECTOMY FOR MALIGNANCY AGE <70 W/O CC	13
262	BREAST BIOPSY & LOCAL EXCISION FOR NON-MALIGNANCY	60
468	UNRELATED OPERATING ROOM PROCEDURES	1
	TOTAL	75

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 2830
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
058	T & A PROC,EXC TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE<18	21
059	TONSILLECTOMY AND/OR ADENOIDECTOMY ONLY, AGE >17	4
060	TONSILLECTOMY AND/OR ADENOIDECTOMY ONLY, AGE 0-17	42
	TOTAL	67

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 5421
FT LEONARD WOOD
FY88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
171	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES AGE <70 W/O CC	3
358	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY AGE >69 &/OR CC	1
359	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY AGE <70 W/O CC	1
360	VAGINA, CERVIX & VULVA PROCEDURES	2
361	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	48
378	ECTOPIC PREGNANCY	4
379	THREATENED ABORTION	1
380	ABORTION W/O D&C	1
	TOTAL	64

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 1359
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
039	LENS PROCEDURES WITH OR WITHOUT VITRECTOMY	53
468	UNRELATED OPERATING ROOM PROCEDURES	1
	TOTAL	54

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DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 5732
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
162	INGUINAL & FEMORAL HERNIA PROCEDURES AGE 18-69 W/O CC	1
320	KIDNEY & URINARY TRACT INFECTIONS AGE >69 AND/OR CC	3
326	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 18-69 W/O CC	5
329	URETHRAL STRICTURE AGE 18-69 W/O CC	1
331	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >69 AND/OR CC	2
332	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 18-69 W/O CC	1
344	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC FOR MALIGNANCY	1
349	BENIGN PROSTATIC HYPERTROPHY AGE <70 W/O CC	1
350	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM	1
452	COMPLICATIONS OF TREATMENT AGE >69 AND/OR CC	1
	TOTAL	17

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 5300
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
162	INGUINAL & FEMORAL HERNIA PROCEDURES AGE 18-69 W/O CC	13
163	HERNIA PROCEDURES AGE 0-17	4
	TOTAL	17

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 2820
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
057	T & A PROC,EXC TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE>17	1
058	T & A PROC,EXC TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE<18	1
059	TONSILLECTOMY AND/OR ADENOIDECTOMY ONLY, AGE >17	12
060	TONSILLECTOMY AND/OR ADENOIDECTOMY ONLY, AGE 0-17	1
	TOTAL	15

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DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 5749
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
309	MINOR BLADDER PROCEDURES AGE <70 W/O CC	1
310	TRANSURETHRAL PROCEDURES AGE >69 AND/OR CC	6
311	TRANSURETHRAL PROCEDURES AGE <70 W/O CC	6
	TOTAL	13

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 7535
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
183	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORD AGE 18-69 W/O CC	1
379	THREATENED ABORTION	3
382	FALSE LABOR	1
383	OTHER ANTEPARTUM DIAGNOSES WITH MEDICAL COMPLICATIONS	16
384	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	18
467	OTHER FACTORS INFLUENCING HEALTH STATUS	199
469	PRINCIPAL DIAGNOSIS INVALID AS DISCHARGE DIAGNOSIS	1
	TOTAL	239

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 5733
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
310	TRANSURETHRAL PROCEDURES AGE >69 AND/OR CC	3
311	TRANSURETHRAL PROCEDURES AGE <70 W/O CC	8
345	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIG	1
461	O.R. PROC W DIAGNOSES OF OTHER CONTACT WITH HEALTH SERVICES	1
	TOTAL	13

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DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 2239
FT LEONARD WOOD
FY 88

DRC CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
053	SINUS & MASTOID PROCEDURES AGE >17	10
054	SINUS & MASTOID PROCEDURES AGE 0-17	1
468	UNRELATED OPERATING ROOM PROCEDURES	1
	TOTAL	12

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 1511
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
040	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	2
041	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE 0-17	8
	TOTAL	10

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 8303
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
227	SOFT TISSUE PROCEDURES AGE <70 W/O CC	1
442	OTHER O.R. PROCEDURES FOR INJURIES AGE >69 AND/OR CC	1
443	OTHER O.R. PROCEDURES FOR INJURIES AGE <70 W/O CC	2
468	UNRELATED OPERATING ROOM PROCEDURES	8
	TOTAL	12

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DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 5349
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
159	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >69 &/OR CC	2
160	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE 18-69 W/O CC	7
	TOTAL	9

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 7510
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
379	THREATENED ABORTION	1
382	FALSE LABOR	1
384	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	5
467	OTHER FACTORS INFLUENCING HEALTH STATUS	1
	TOTAL	8

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 7675
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
185	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE >17	7
187	DENTAL EXTRACTIONS & RESTORATIONS	1
	TOTAL	8

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DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 0870
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
040	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	4
268	SKIN, SUBCUTANEOUS TISSUE & BREAST PLASTIC PROCEDURES	1
468	UNRELATED OPERATING ROOM PROCEDURES	2
	TOTAL	7

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 5359
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
160	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE 18-69 W/O CC	7
	TOTAL	7

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 2309
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
025	SEIZURE & HEADACHE AGE 18-69 W/O CC	1
069	OTITIS MEDIA & URI AGE 18-69 W/O CC	1
168	MOUTH PROCEDURES AGE >69 AND/OR CC	1
187	DENTAL EXTRACTIONS & RESTORATIONS	2
427	NEUROSES EXCEPT DEPRESSIVE	1
	TOTAL	6

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 8511
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
276	NON-MALIGNANT BREAST DISORDERS	6
	TOTAL	6

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DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 9353
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
029	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE 18-69 W/O CC	1
218	LOWER EXTREM & HUMER PROC EXC HIP,FOOT,FEMUR AGE>69 &/OR CC	1
254	FX,SPRN,STRN & DISL OF UPARM,LOWLEG EX FOOT AGE 18-69 W/O CC	2
332	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 18-69 W/O CC	1
445	MULTIPLE TRAUMA AGE 18-69 W/O CC	1
	TOTAL	6

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 5845
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
341	PENIS PROCEDURES	5
	TOTAL	5

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 8331
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
227	SOFT TISSUE PROCEDURES AGE <70 W/O CC	4
468	UNRELATED OPERATING ROOM PROCEDURES	1
	TOTAL	5

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DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 0460
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
008	PERIPH & CRANIAL NERVE & OTH NERV SYST PROC AGE <70 W/O CC	3
468	UNRELATED OPERATING ROOM PROCEDURES	1
	TOTAL	4

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 2860
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
058	T & A PROC,EXC TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE<18	2
060	TONSILLECTOMY AND/OR ADENOIDECTOMY ONLY, AGE 0-17	2
	TOTAL	4

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 7759
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
225	FOOT PROCEDURES	4
	TOTAL	4

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 8339
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
226	SOFT TISSUE PROCEDURES AGE >69 AND/OR CC	1
227	SOFT TISSUE PROCEDURES AGE <70 W/O CC	2
270	OTHER SKIN, SUBCUT TISS & BREAST O.R. PROC AGE <70 W/O CC	1
	TOTAL	4

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DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 5850
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
313	URETHRAL PROCEDURES, AGE 18-69 W/O CC	3
	TOTAL	3

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 3142
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
014	SPECIFIC CEREBROVASCULAR DISORDERS EXCEPT TIA	1
073	OTHER EAR, NOSE & THROAT DIAGNOSES AGE >17	2
	TOTAL	3

DIAGNOSIS RELATED GROUPS FOR PROCEDURE CODE 2220
FT LEONARD WOOD
FY 88

DRG CODE	DIAGNOSIS RELATED GROUP TITLE	DISPOSITIONS
064	EAR, NOSE & THROAT MALIGNANCY	1
069	OTITIS MEDIA & URI AGE 18-69 W/O CC	1
070	OTITIS MEDIA & URI AGE 0-17	1
	TOTAL	3

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APPENDIX K

LENGTH OF STAY FOR

SUGGESTED SAME-DAY SURGERIES, FISCAL YEAR 1988

REPORT A

PAGE 1

NUMBER OF PATIENTS WITH SUGGESTED SAME DAY SURGERY
AS PRINCIPAL SURGERY
FY 1[illegible] WORD, BY S[illegible]

CODE	PROCEDURES ICD-9-CM	LOS 1DAY	2DAYS	>2DAYS	T
0439	SUTURE OF CRANIAL AND PERIPHERAL NERVES	0	0	1	
04E0	TRANSPOSITION OF CRANIAL AND PERIPHERAL NERVES	0	1	1	
0670	EXCISION OF THYROGLOSSAL DUCT OR TRACT	0	1	0	
0892	OTHER EXCISION OF EYELID	0	0	1	
0894	REMOVAL OF LESION OF EYELID, NOT OTHERWISE SPECIFIED	1	0	0	
0933	REPAIR OF BLEPHAROPTOSIS,RESECTION,LEVATOR MSCL ADVANCE,APONEUROSIS	0	1	1	
0934	REPAIR OF BLEPHAROPTOSIS BY OTHER TECHNIQUES	0	0	1	
0945	OTHER REPAIR OF ENTROPION OR ECTROPION	0	1	0	
0970	RECONSTRUCTION OF EYELID, NOT OTHERWISE SPECIFIED	1	2	4	
0971	RECONSTRUCTION,EYELID INVOLVING LID MARGIN,PARTIAL-THICKNESS	1	0	0	
0973	REPAIR OF CANALICULUS	0	0	1	
1359	OTHER EXTRACAPSULAR EXTRACTION OF LENS	0	1	53	
1511	RECESSION OF ONE EXTRAOCULAR MUSCLE	0	1	9	
1513	RESECTION OF ONE EXTRAOCULAR MUSCLE	0	0	3	
2220	INTRANASAL ANTROTOMY	0	1	2	
2239	OTHER EXTERNAL MAXILLARY ANTROTOMY	0	7	5	
2301	EXTRACTION OF DECIDUOUS TOOTH	1	1	0	
2309	EXTRACTION OF OTHER TOOTH	1	0	6	
2329	RESTORATION OF TOOTH BY FILLING	1	1	0	
2349	OTHER DENTAL RESTORATION	0	1	0	
2801	TONSILLECTOMY WITHOUT ADENOIDECTOMY	0	11	4	1
2811	TONSILLECTOMY WITH ADENOIDECTOMY	0	61	6	
2850	ADENOIDECTOMY WITHOUT TONSILLECTOMY	2	1	1	
3149	LARYNGOSCOPY AND OTHER TRACHEOSCOPY	0	2	1	
4929	OTHER ANAL STRICTOTOMY	0	0	2	
5309	UNILATERAL REPAIR OF INGUINAL HERNIA, NOT OTHERWISE SPECIFIED	3	3	11	
5310	BILATERAL REPAIR OF INGUINAL HERNIA, NOT OTHERWISE SPECIFIED	1	0	0	
5349	OTHER UMBILICAL HERNIORRHAPHY	0	1	8	
5359	REPAIR OF OTHER HERNIA OF ANTERIOR ABDOMINAL WALL	0	2	5	
5421	LAPAROSCOPY	0	24	31	
5449	PERITONEAL DIALYSIS	0	1	1	
5601	URETEROSCOPY	0	2	0	
5732	OTHER CYSTOSCOPY	5	5	7	1
5733	TRANSURETHRAL BIOPSY OF BLADDER	1	9	3	1
5749	OTH TRANSURETHRAL EXCISION,DESTRUCTION,BLADDER LESION,TISSUE	0	1	12	1
5845	REPAIR OF HYPOSPADIAS OR EPISPADIAS	0	0	5	
5850	RELEASE OF URETHRAL STRICTURE	0	0	3	
5860	DILATION OF URETHRA	0	0	1	
7314	OTHER VAGINOTOMY	0	0	1	
7177	OTHER REPAIR OF VULVA AND PERINEUM	0	0	1	
7340	MEDICAL INDUCTION OF LABOR	1	0	0	
7391	EXTERNAL VERSION TO ASSIST DELIVERY	1	0	1	
7510	DIAGNOSTIC AMNIOCENTESIS	6	1	1	
7559	OTHER DIAGNOSTIC PROCEDURES ON FETUS AND AMNION	233	3	3	2
7561	REPAIR OF CURRENT OBSTETRIC LACERATION OF BLADDER, URETHRA	0	2	0	
7679	OTHER FACIAL BONE REPAIR	0	0	1	
7695	CLOSED REDUCTION OF MANDIBULAR FRACTURE	0	0	0	
7697	OTHER CLOSED REDUCTION OF FACIAL FRACTURE	0	0	1	
7741	OTHER MYOTOMY	0	1	3	

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REPORT A

PAGE 2 [illegible] PATIENTS WITH SUBJECTED SAME DAY SURGERY AS PRINCIPAL SURGERY BY LENGTH OF STAY BY [illegible]

CODE	PROCEDURES ICD-9-CM	LOS 1DAY	2DAYS	>2DAYS	
8206	OTHER TENOPLASTY OF HAND	1	0	0	
8803	BURSOTOMY	0	0	12	
8839	OTHER INCISION OF SOFT TISSUE	0	0	1	
8814	FASCIOTOMY	0	0	2	
8861	EXCISION OF LESION OF TENDON SHEATH	0	1	4	
8869	EXCISION OF LESION OF OTHER SOFT TISSUE	1	1	2	
8842	OTHER TENONECTOMY	0	0	1	
8854	OTHER FASCIECTOMY	1	0	0	
8869	OTHER EXCISION OF SOFT TISSUE	1	0	0	
8864	OTHER SUTURE OF TENDON	0	0	1	
8887	OTHER PLASTIC OPERATIONS ON MUSCLE	0	0	1	
8888	OTHER PLASTIC OPERATIONS ON TENDON	0	0	1	
8897	INJECTION OF THERAPEUTIC SUBSTANCE INTO TENDON	0	0	1	
8401	AMPUTATION AND DISARTICULATION OF FINGER	0	0	1	
8411	AMPUTATION OF THIGH	0	0	2	
8500	MASTOTOMY	0	0	1	
8511	PERCUTANEOUS (NEEDLE) BIOPSY OF BREAST	0	3	1	
8512	OTHER BIOPSY OF BREAST	33	24	9	
8521	LOCAL EXCISION OF LESION OF BREAST	0	0	2	
8949	OTHER MANIPULATIVE GENITOURINARY SYSTEM TREATMENTS	5	0	4	
9326	MANUAL RUPTURE OF JOINT ADHESIONS	0	1	1	
9389	APPLICATION OF OTHER CAST	1	0	5	
9709	REMOVAL OF EXTERNAL IMMOBILIZATION DEVICE	0	1	0	
9912	REMOVAL OF INTRALUMINAL FOREIGN BODY FROM NOSE NO INCISION	1	0	0	
9929	REMOVAL OF FOREIGN BODY FROM EYE WITHOUT INCISION	0	0	1	
		314	190	254	7

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APPENDIX L

DECISION MATRIX

DECISION MATRIX

CRITERIA:	MET CRITERION (yes/no)
1. Patients willing to have SDS procedures performed.	YES
2. Staff willing to perform SDS porcedures.	YES
3. Sufficient demand for SDS procedures.	YES
4. Positive funding implication for more than half procedures under DRG reimbursement.	YES

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